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WOODS & WILDS









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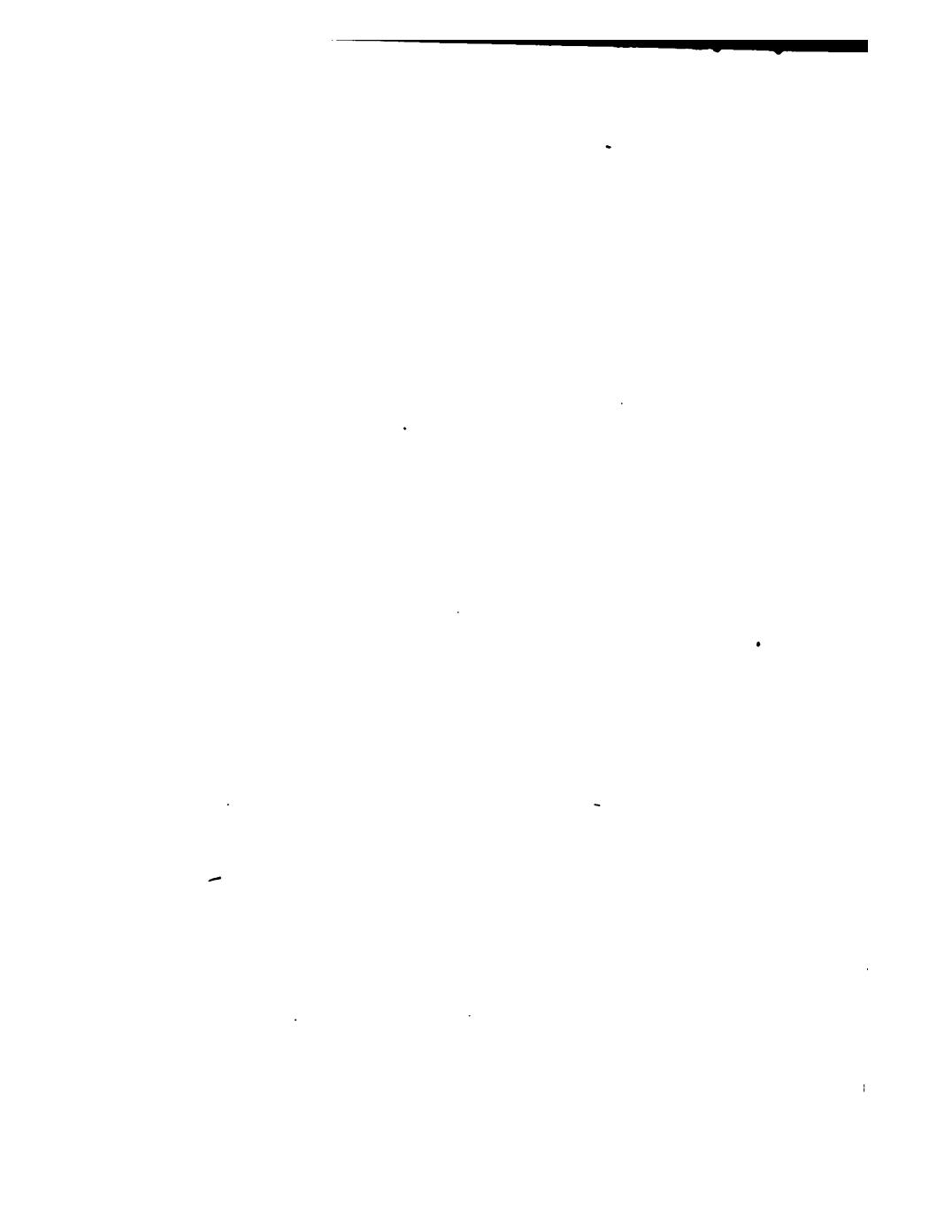
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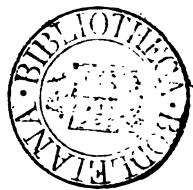
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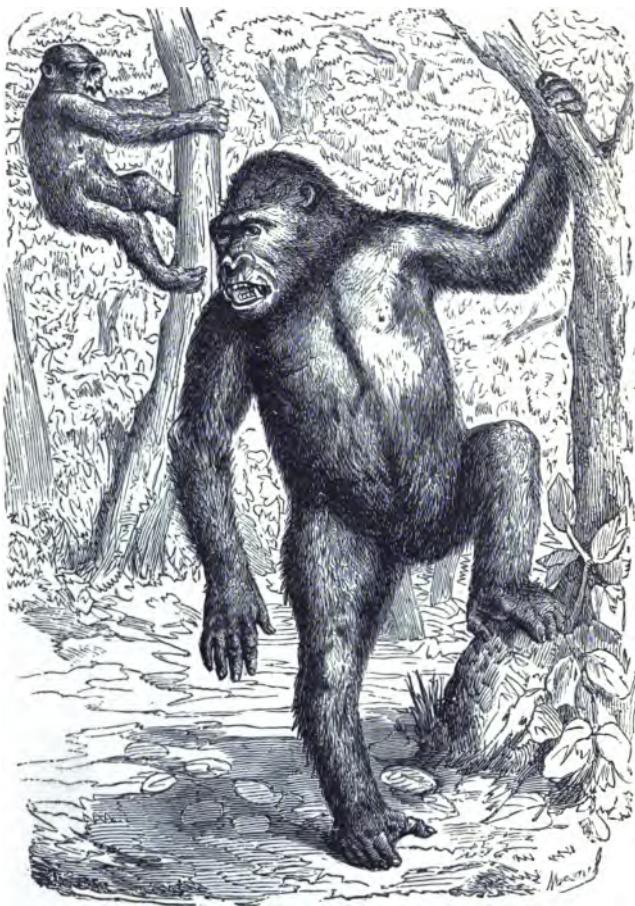
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MOUNTING FOR THE NIGHT.

See Page 251.

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4

IN THE WILDS OF CALIFORNIA.

WITH THE GRIZZLY BEAR.



IN THE WILDS OF CALIFORNIA. WITH THE GRIZZLY BEAR.

PART I.

IN the year 1852, when things were at their busiest in the American Gold States, I formed one of the chief Government surveying-party engaged in laying out ground from San Francisco Bay to the mountains of the coast range.

During that time there were various opportunities of seeing Californian life in a way unknown to most who have described the country; and we enjoyed a great variety of field-sport and woodcraft all along. Even round the bay, and throughout the level land of the Contra Costa, or over the settled bottoms about San José, game of every sort fairly swarmed during the spring season while we were occupied thereabouts. And a better test could not well have been had of it than our survey-

chain, going ahead over everything, through scrub, chaparal, wild-corn, or mustard-brake.

Each of us had a six-shooter in his belt, and it may easily be conceived that when quail, crested partridge, or white cranes were started, or perhaps a black-tailed doe hiding to save her fawn, or a couple of huge donkey-hares, or a puzzled young antelope, the sport at times tended to drop our duty to Government out of view.

Whatever our success in the field,—which could not be much with such tools, not to speak of the two sharp surveyors at our head,—a pretty good time could generally be had about camp at leisure hours, trapping, tracking, or fishing.

The creeks from the bay abounded in trout, mullets, and the finest salmon in the world, while moreover it might so happen that you hooked an alligator-terrapin or a snapping-turtle, the play of which would have been a caution to a stay-at-home Britisher. Early of a morning the great wapiti-elks might have been seen by the water-edge, come down to feed and drink, with their legs and antlers showing like a newly sprung grove through the fog: then there was the tree-game, from sloths to racoons, going under the general name of 'possum; the ground-venison, such as porcupines, armadilloes, and land-turtle; without mentioning the coyotés, burrowing-squirrels, and no end of skunks and gophers. Out of the whole of them we managed not only to enliven our spare time during the greater part of the summer, but to freshen the camp-fare not a little.

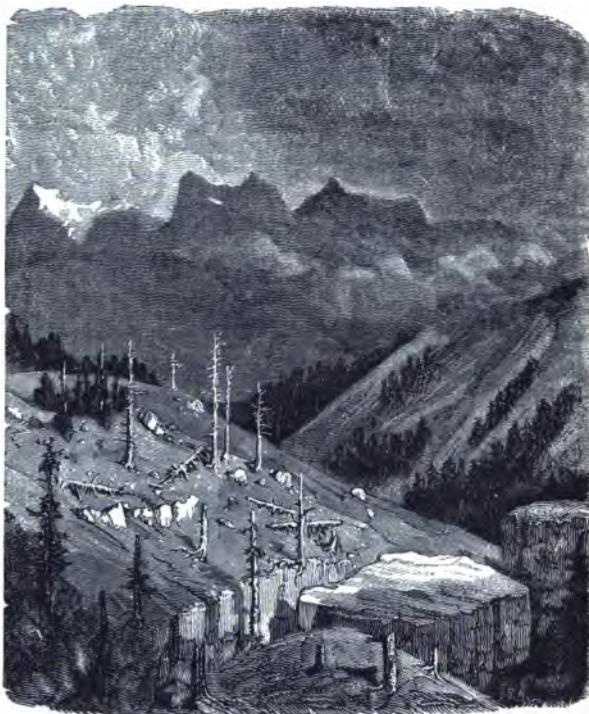
Ultimately, however, our quarters were shifted much further inland, to rougher ground beyond San Mateo, under the spurs of the hills ; and what with the advance of the season, together with the change of locality to drier soil, almost everything in the way of free live-stock seemed to have gone, save where too shy to be got at.

Plenty of Spanish cattle there were, to be sure, wild enough in all conscience to be looked upon as fair game, and bold enough too ; but these we could not meddle with. The only other creatures likely to be seen, worth speaking of, were an occasional grey hill-wolf loping along, and the bears, both brown and black, which left sufficient signs of their vicinity, though much too shrewd to come athwart a party of Uncle Sam's men if they knew it.

The waggon and tents were at last settled down in a handy spot by the head of a creek from the hills. The one side commanded a stretch of fine open savannah, by which we had to work back toward the Bay settlements ; the other was more broken ground, leading up to the pine-barrens and redwood ranges. This latter district had to be finished off before we turned to the level, and that duty proved quite as hard as it looked.

Most parts we drove across in most determined style, tearing over thorny chapparal, through poison-oak brush, and up streaks of rock. In parts it could not be cleared, even by the axemen's help, and had to be done by computation. Some again was slumped in liberally, upon the averaging system, whatever the future settlers might do with it.

One or two of the localities at hand were by no means inviting to look at, by way of neighbourhood, and they



A PINE-BARREN.

went by suitable names. There was Guzman's Gulche, as dreary a rift into the solid stone as one could wish to

see, with a vein of quartz shining up at the end, remarkably like gold-sign, but quite out of reach. What was more to the point there was Grizzly Cañon,* a dismal hollow of bush and scrub, running off the level into a belt of immense redwoods that shot against the sky.

According to the Spanish vacqueroes we met with, it had been formerly noted as a spot where real grizzly bears used to breed, though none had been heard of for years so far down, and the likelihood was that the survey would make no difference in that respect. However, the Spaniards were known to look upon us with small favour; and when the question came to be about interfering with a regular "Ephraim," as backwoodsmen called the grizzlies, it must be owned there were few among us who considered it in a sporting light.

Judge Tracey, the surveyor, and our compassman, Mr. Higley, were the only members of the party who had been at the mines besides myself; they knew well how the case stood; in fact, that we were much more likely to have to take to tree than a grizzly bear was, if we chanced to meet one. For my own part, I had never happened to see one, even when up the Yuba River. Still, I cannot say I fell short as to this caution on the point; much less could I enter into the hunting view of it that was taken by one or two of our number.

At the first occurrence that took place in connection, it so chanced that I was principally concerned. My part of

* Pronounced Canyon.

the surveying duty was simply to carry "fore-chain," or take the line along for the bearings given by the surveyors, sticking in the measuring-pins as I went; while the hinder end was taken by my friend Lettsom, a young man from the north of England, who had joined the party with me. Neither of us could be said to occupy a high post in the service as yet, but so far as our head-work went, from passing the orders to keeping tally of the marks, the responsibility was all on my companion's shoulders. Indeed, setting aside his advantage in years and height, he seemed to have a natural turn for the business to which I could not pretend. It was lucky for him, however, on this occasion, that I took it easy when possible.

We were rounding one of the stiff corners, too hard to get over direct, and each made the best of his way for the next bearing-point. Having sighted it, I found myself ahead of the rest, and sat down to light a pipe till they joined. I had just struck a lucifer, when a rustling caught my ear in the chapparal close by, and looking over my shoulder I saw the upper half of an immense bear, as he rose on end to eye me from below.

Neither he nor I uttered a sound, with the exception of a slight snuffle on his part, as if the smell of the match were not to his liking. At the same time he put up a claw like a tree-root, at the end of a monstrous long foot, giving his muzzle a fretful kind of rub, whilst our eyes met. A most particularly wicked little one his was, as red as a live coal; and not to speak of the great size of

his head, there was something so peculiar about his colour, neither black, brown, grey, nor yet grizzly, but more of a steel-blue with a mildew over it, that I kept perfectly quiet, not so much as moving a hand to my loaded revolver, still less calling out to my companions behind.

The lighted match, by the way, burnt me to the quick without being felt at the time.

The bear was undoubtedly a grizzly, and a full-grown



THE GRIZZLY BEAR.

one, but from what I heard afterwards he must have been quite young. Possibly he observed that the case was similar in that respect on my side; at all events he dropped on his tracks again, keeping uphill as before.

By that time the men could be heard on their way up in the same direction, crashing through the bush and laughing and talking like schoolboys. I knew that if my friend Lettsom caught sight of the beast, he was sure to

fire, and being one of the best shots among us, not likely to miss; so to prevent accidents I sung out at last—

“ ‘Ware snake—a rattler!” I hailed, in a tone as like a whisper as circumstances would allow; and that stopped all of them at once.

“ Which way?” called Lettsom; “ don’t lose sight of him—give us a chance!”

I did not soon forget the bear’s style of taking this noise. He reared on end again, looking back at me, giving a low growl, and seeming to consider whether any affront was meant. In fact, for a moment or two it was doubtful if he would not come down like thunder; but, finding all quiet, he concluded accordingly, and went off straight for the redwoods.

When the party joined me, all was safe; but my story was not by any means well received. No sooner did they take it in than they opened full cry against my behaviour in the matter; and the foremost to disapprove was Fred Lettsom. Fred had notions as to sport that might have done well enough at home in Yorkshire, but would certainly have been inconvenient to carry through California; though his worst luck was not to come in that shape, poor fellow.

Among the party was a lump of a red-haired Missouri lad, who rejoiced in the odd name of Billy Rufus. He declared they saw so many b’ars of all sorts out west that he made no account of them, and asked nothing better than to tackle a real Ephraim, if such it actually was, which he much doubted. The surveyors on coming

up, however, considered I was in the right, and had done quite properly; nor was it long before an incident occurred to turn the laugh altogether against Rufus himself.

We had finished our measurements on the hill-ground without further trouble of the sort, and had put in the last angle-post in that direction; after which we were making our way back to camp for the night. Rufus, who was our under-axeman, missed some article or other belonging to him, and returned to look for it near the post. He overtook us again in a speechless state, between hurry and fright, without his hat, and his red hair bristling like fire. By his account, when made out, he had seen a bear-cub of the most extraordinary size and colour, standing at the foot of the new-made mound, apparently gazing at the survey-post in astonishment. Before he got within reach, it went close up, examined the Government hieroglyphics most carefully, then gave a yell and proceeded to claw at the post as if resolved to have it up. On this Rufus was, of course, running in, he said, to make short work with the creature; but, hearing sounds desperately like more of the family on the way down, he concluded to come off for help.

Billy's story was rather salt in some respects, especially as he declared there must have been half-a-dozen of them coming down in Indian file; but, if he could be believed, the cub was neither of the black nor the brown breed; and at that time of the afternoon no one was inclined to go back and see.

That there was some truth in the Missouri man's statement, appeared next morning; for clawed down the angle-post was, with marks in it which no ordinary bear could have made. A new post was put in, leaving further difficulties to be managed by the first settler on the claim. Our subsequent duty lay back again on the level toward San Mateo, where we thought no more about such points. But we were not to get off just so easily.



IN THE WILDS OF CALIFORNIA WITH THE GRIZZLY BEAR.

PART II.

OUR special trouble on the low ground was, as formerly, with the wild Spanish cattle. These long-horned, little, dingy-coloured savages were here worse than ever, herding over the rich virgin pasture, and ready to charge at all and sundry, if not mounted, the survey appearing beyond all to rile them up. The flags on the measuring pins set them fairly mad, and whoever chanced to wear a red shirt was particularly marked out, till at times they quite stampeded us off the line, axemen included. Besides the strict orders against meddling with them seriously, there were always enough of idle Spanish vacqueroes scouring about on the watch to pick up a pretext for complaints and lawsuits, which the Government of the new State could not then help attending to; though, so

far as concerned our annoyance, the Spaniards took but little pains, seeming rather to relish the sight.

This was all very well for Judge Tracey, the surveyor, who kept a riding-horse, and got along comfortably enough when using it. As for our compass-man, Mr. Higley, he could make shift with one of the mules; but one morning the case was pushed just too far to be borne.

A shaggy-headed bull gave chase to Lettsom and me, and, so far from being daunted, would certainly have finished one or the other before there was time to use our Colts, but for the lucky neighbourhood of a clump of bush on the open, with a large tree in the midst. We thus dodged him, firing several shots after all with very little effect, till the two axemen came up to our help, and settled the business.

Both surveyors, of course, had observed what passed, and, though no Spaniards could have been within view at the time, Mr. Higley rode up with decided instructions to bury the carcase carefully there and then, turfing it up, and on no account meddling with it further. This he waited to see done. The work was then proceeded with as before for the rest of the day, during which some miles were completed; and, as usual, by sundown we got round to camp, which was still in the old place.

Nothing more had been said of the bull till supper was serving up for the bell-tent, where the surveyors had their quarters, our own meal being all ready at the fire, outside the main-tent. Nor in fact did any one seem to have

thought of it again, till the time came for smelling that perpetual salt pork, as we could do through the best fry which our cook could turn out. To tell the truth, not only were camp-stores seldom varied after being so long off from the settlements, but even Uncle Sam's chief staple had begun to get rusty for our taste, and that in spite of every attempt to help it out on the part of our two camp-keeping hands, old Tobin the teamster and little Andy the cook, who made up the party.

Andy was a Malay, and though clever at his own work, a perfect imp for skill at trapping, snaring, and decoying; while our worthy teamster, who came out of New Orleans, and was of course far above associating pleasantly with aught in the coloured connection, at the same time had a touch of the true nigger turn for "'possum," always treeing and baiting for odd venison at every chance. There was rather a suspicion amongst us that the pair occasionally squared their differences behind backs, to the concocting of what Andy called a *blind-frijolé*; which in fact often proved too good to be inquired into.

Somehow that evening the mess was not so successful; at all events there were sundry discontented remarks, with a pretty plain allusion or two to the prime fresh beef lying "cached" at the moment within reach, under the big oak on the level. However, the night was dark, and the spot some distance off; moreover, the mouth of that ugly-named redwood cañon had to be passed on the way, and after a stiff day's survey all hands seemed to think the treat not worth the pains. The surveyors had no better

fare than ourselves ; so it was just going to be made the best of, with the prospect of a good pipe at the fire before turning in, when suddenly we missed our Missouri axeman, Rufus, from the mess. It turned out he had left before the talk commenced ; and, as Billy never failed at his grub, this meant something in his case.

The truth was easy to guess, when we brought to mind his wistful looks behind him that day. He had taken his tools along with him, after giving his knife a sly rub of the grindstone, and clearly intended securing some tit-bits for a late roast to his own cheek ; indeed Billy was not the character to think of extra slices for his friends.

He could not have been many minutes gone, when, on listening after him behind the tent, we could hear plain enough that the coyotés had been beforehand in the design, evidently likely to save Billy some trouble at shovelling up. Then, in the midst of their noise, off they scattered with a louder yell than before ; close upon which we could make out a loud note or two from our axeman's voice, apparently giving them a Missouri war-whoop to quicken their flight.

It now occurred to our joky old teamster that the cook and he, both being fresh, might give Master Bill a start in turn, as he well deserved ; namely, by setting off quietly across his tracks, on a nearer cut over the open. The right bearings they at once got from us. Accordingly away they set at a good rate, the Malay first signifying for our benefit that the supper might perhaps

not lose by waiting a little, though the surveyors had got theirs served.

By old Tobin's subsequent account, they steered fair for the clump of bush, with the big tree for a mark against the stars. They soon got there: everything was dark inside, and all quiet except the pattering of the earth on the leaves where Billy's shovel seemed at work, with the grating of his knife, apparently, as he fell closer to.

Going up nearer, the teamster caught sight of him through the dusk, hard at it; there he was, sure enough, evidently never dreaming he had been followed, dodging up and down in the hole, and tugging and cutting away like a good one. Tobin then made Andy wait, while he stole softly in behind, flattening his hand to come down sharp upon the fellow, and setting his mouth for a suitable remark in Mr. Higley's style. At the same time he thought he heard something like a husky whisper from aloft, with a rustle out of the tree; and our worthy teamster being as superstitious an old boy as ever was raised on the Mississippi, this "struck him strange" at the moment, as he expressed it.

Rufus's manner of handling the meat had caused a horrid notion already, as if he began to muzzle at it in the raw; so, with a pretty smart slap on his shoulder, Tobin commenced a speech of his own, by no means inferior to what our compassman would have given. The words stuck in his throat, however, for he found himself turned round upon with a growl like thunder—his escape being solely due to the depth of the hole, and the other's

hands being full at the instant, with his jaws as well. It was no less than an enormous old grizzly that he had tackled in this fashion. As for poor Rufus, he was fast treed overhead, trying for breath to tell how matters stood. Tobin fired one shot at random as he bolted, tumbling over little Andy, who came off after him into camp. The first alarm among us, in fact, was such that the Malay ran some risk of being shot by mistake for the grizzly in pursuit.

The Judge and Mr. Higley got out their rifles, in addition to which they had it in their power to keep mounted on the occasion. They accordingly decided at length to go in a body and see what could be done for getting the axeman off. The survey-duty for next day was certainly much more to the point than any mere risk to Billy, or his night's comfort ; and even then the whole object lay in scaring the bear off, or at least drawing it out for a sufficient time, while the Missouri man could get down to run. This was given him to understand, and proceedings were therefore tried on the cautious system.

But whether the old bear was too much bent on his night's meal, or had an eye to the tree besides for supplies, it proved difficult to make him leave it at all on any reasonable terms. Back he always would go again, growling savagely ; Rufus having once more to scramble up, before he was well down, and more than once he just narrowly missed being gripped.

The bear appeared set on keeping cover within reach

of him, where there was no mark for a shot ; so that we had nothing for it but to fire the brushwood to windward, which was cleverly done by the Malay creeping in. Here it was found we had brought matters to a head, and no mistake ; for though our axeman of course succeeded in getting down on the safe side, the bear no sooner took the open, than instead of giving chase to the mounted surveyors, as calculated upon, he turned and charged us where we stood.

It may easily be believed I never forgot the sight ; the blaze of the scrub showing the old monster as he tore along upon us, with the hoar-frost bristling from him, as it were, and his swinish eye at red-heat.

We had taken care to get the channel of a dry arroyo in our favour, but he came on like a race-horse, and was over it in a twinkling, with the bullets of five six-chambered Colts emptied at him, to no apparent effect save on one fore leg.

Just as he was upon us in the dusk, we scattered right and left, some dodging down the dark bed of the water-course. My friend Lettsom had still a bullet left, and seeing it was useless to run, he stood on the bank as the bear dashed at him, then fired close into the brute when rearing on end, claw up, with his jaws about his very shoulder.

Down they went together into the arroyo-bed, the bear uppermost, but luckily losing hold for a moment or two in the reedy bottom. Owing to his crippled fore leg, too, the brute did not nip poor Fred so quickly as must other-

wise have been the case, but kept searching in a style that made the sedge fly like rags.

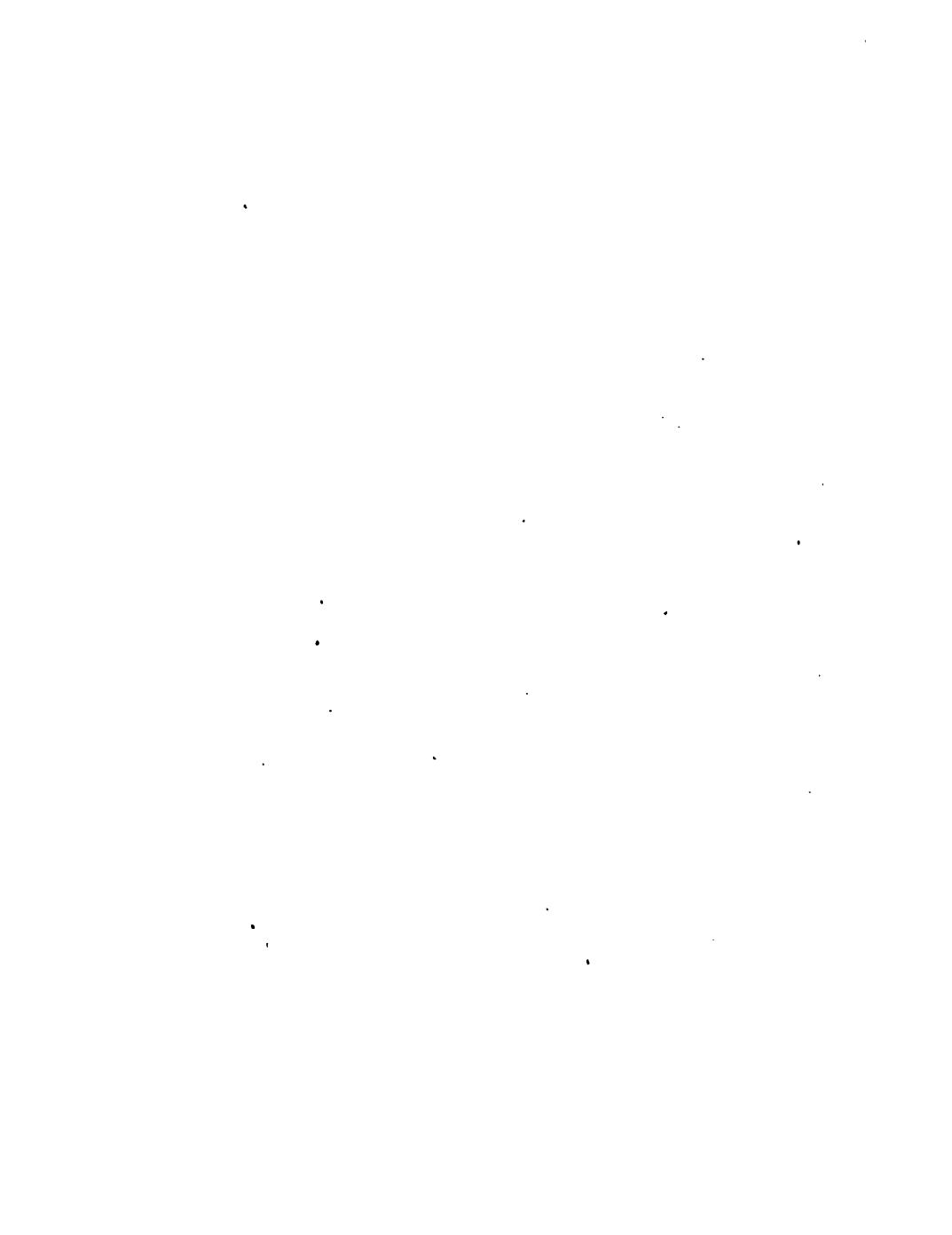
Not a shot among us was ready, and the quickest loaded would have been too late. Mr. Higley had left his mule, taken a steady aim, and hit the old bear somewhere, yet without serious effect. He went on loading again as he ran up, for it must be said of our companion that he was not the character to flinch at such points, no matter who might be concerned.

By this time, however, we did not even see which was which in the shadow of the arroyo. The best we could have done was useless, had it not been for the old Judge himself, who came forcing his terrified mare right over the hollow; then he threw himself off, let her go, and next moment was down in the arroyo, rifle in hand for the proper moment. He took the grizzly fair in the eye when just rising with Lettsom in the hook of its free fore paw; a sure shot, that dropped the brute a dead weight atop of the poor fellow, nearly squeezing the last breath out of him. We pulled him out to all appearance finished by it, drenched in blood, with his clothes in strips. A little time, however, brought him to again, not seriously injured, though there was more than one ugly rip. A score of bullets at the least had been put into the bear, and none of them signified until the last had smashed his skull.

A cooler thing of the sort never was done than old Judge Tracey did on the occasion, for he actually took care to put a fresh cap on his rifle before pulling trigger.



TRACERY, LATISSUM, AND THE BEAR.



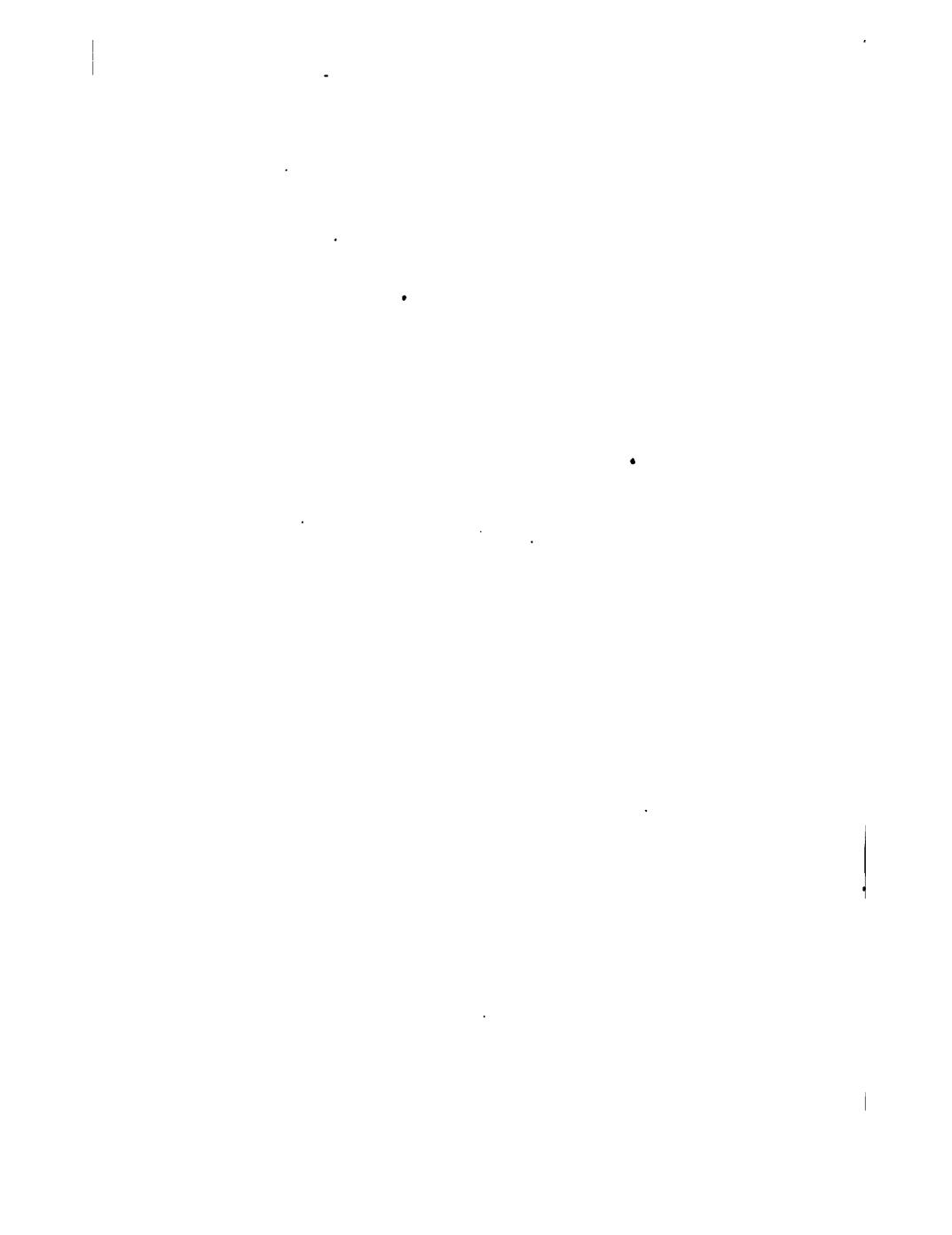
If he had hung fire or missed the mark, not only would all have been up with Lettsom, but with a few more of the United States Survey.

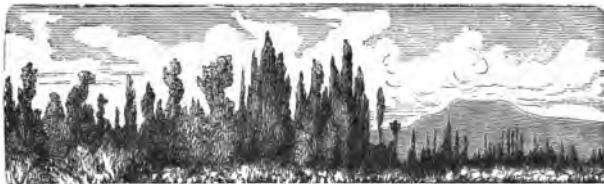
The old grizzly bear was a piece of game such as rarely had fallen to the luck of any surveying-party, or, for that matter, of any hunter in the Gold State. Had the season been cooler, within reach of town or settlements, he would have been worth no small sum to us, taking meat and hide together, besides the showing parts; his weight being about that of a full-sized ox. As it was, being in prime condition, and mostly nut-fed at that season, he furnished the staple of several days' provision in camp.

As our ground subsequently led us from the redwoods, the further adventures of the party did not turn on any incidents of the same nature. It was not the last grizzly that I saw tackled and killed during ten years in the country, not by a score at the least; some of which happened to cost a good deal more damage to those concerned. But even allowing for the fact that this was the first in my experience, I should say he was decidedly the hardest to manage of them all.



IN THE WOODS OF CANADA.





IN THE WOODS OF CANADA.

BEAVERS AND BEAVER TOWNS.

PART I.

“**A** LAS for our old home! Desolation—emptiness—the work of a lifetime swept away!” groaned a beaver to his wife, with a flap of his broad tail, expressive of mingled scorn and indignation. “Torn to pieces, to make room for the new mill-dam that these humans think they know how to put together. And the friends, ‘our happy tribe’—together we gnawed the logs, together we fed on the bank, and dwelt side by side; and now, whither are they fled? Scattered,—like the wreck of our happy dwelling, which the waters have carried beyond our depth. Times are changed for the worse since our young days; and the older the world grows, my dear, and the longer the rivers run, the fewer beavers and the more fools dwell upon their banks.

“Fools did I say?” cried he, rousing himself at the thought of the wrongs of his race, while another decided flap accompanied his words, and his partner listened with attentive ear and gleaming eye to his animated language. “Fools did I say? Idiots! Beings whose utter incapacity of mind and body glories in destroying what they can never imitate!

“And what are these inventions of theirs—their implements—their edifices? Why, a man and his tools are two separate affairs. If he leaves them behind—where is he? If he breaks one and has no smith at hand with *his* tools—where is he? If he blunts them and has no grindstone, and no stonemason with *his* tools to make one—where is he? If he cannot find limestone for his mortar, and cow’s hair, and what not—where is he, and where is his work? And when the floods come—where is he, and where are all his fine constructions? Ay, my dear, let the west wind and the cataract answer me that.

“But a beaver *is* a beaver, worth a human and his tools put together ten times over. Whatever happens, there he is. Wherever he is driven by the draining of his pools or the levelling of his dam, there he is. The beaver is a beaver still; give him his tail and his teeth, and back him against the finest and strongest tools that ever built a dam against wind and water, and plastered it over with compost of lime and hair!

“Yes! *wherever* we may go,—and go we must, for we beavers have had our day,—change and emigration are now the cry. Humans emigrate to beaver-land—beavers

must emigrate too ; but whither ? Are there yet rivers to be found where no beaver ever yet laid his brain and his tail together, and made the water alive with his dwellings and his work ? Thither let us go, and, gathering our scattered forces, prove ourselves superior to the adversities of civilization ! ”

“ You do well, my love,” replied a gentle voice beside him, while a feminine flap of another broad tail was heard in a subdued splash under the water,—“ you do well to withdraw from a region where your superior example and endowments have so little benefited mankind. Vain, apparently, have been all the attempts of human beings to absorb into their own brain the wisdom that dwells in ours. Generations of beaver hats have been worn out—our parents, our kindred, our sons, and our daughters sacrificed in the cause—and men are no wiser ! ”

“ The fur from our bodies, felted and fitted to the human hand, has been likewise adopted, and with a like result to their practical utility. Nor can I anticipate that the newest covering to the human head, so pretentiously styled a ‘*wide-awake*,’ should indicate or stimulate an intelligence superior, or even equal to that of our little ones, *born* as they are with their eyes wide open.

“ Might we hope for better days ; that wisdom should not die with you ; that men might live and learn ; a glorious future might yet lie before you—to educate the human head and hand—Ah ! let us remain—my heart clings to this old reedy bank ! ”

“ Never ! my darling, never ! ” and he plashed a

despondent plash as he spoke. "The days of 'go ahead' are not ended yet.

"Men have yet to learn what strength, what vigour, what resources of every kind reside in the tail. Deprived by niggard nature of that most useful, that essential appendage, how can they understand its value, or appreciate the living virtue of that which when cooked for food they only esteem as the richest diet? No! let others go *ahead* through life; but while this old heart beats warm beneath the beaver fur, the motto of my existence shall be, 'Make sure you're right, then go *a-tail*.'"

Thus saying, he plunged into the stream, and for a few seconds disappeared, but was soon to be descried making his way down stream with little apparent movement of the feet, but with a conscious self-assertion of the member he so highly prized, which acted as a rudder, while he neared the rapids, and was soon concealed by the turnings of the stream from the view of his solitary mate, who wept in silence over the shattered home of her early loves.

Soon, however—for inactivity under misfortune forms no part of the beaver creed—soon she discerns, first by the distant sound of the ever-useful organ which so greatly assisted his movements, secondly by the odour of *castoreum*, by which beavers are so successfully traced by the hunters, and, finally, by the vision of the well-beloved nasal rotundity which appeared above the water, that her mate had neither spoken, resolved, nor departed in vain.

Would that my tale had the breadth and energy which so greatly assisted him while he led the way to new waters, flowing through a yet untrodden forest, whose gigantic shade sheltered the growth of young and succulent boughs, and seemed to invite the disestablished and disheartened pair to begin life again! Happy were



THE BEAVER.

they that no prognostications of the revolutionary progress of a so-called civilization disturbed their minds, or disengaged their efforts! Intent on the duties of the present, they left anxiety for the future, until that future should in its turn become the present.

Happy pair! whom destruction and disappointment

only nerved to fresh effort; and who shall say that the sagacity expressed in action by those broad tails of yours, did not surpass the wisdom of many a human brain, toiling to create for himself appliances of existence alike foreign to his better nature, and to his highest needs?

Happy pair! I think I see you on the deep shade of that virgin forest, where the weary sun looks in aslant each evening, and the cool shade protects your labours through the day. Deep among the ooze and the tangled reeds, by the near margin of the running water, you lay the foundation sound and strong; for you know by experience that tempests blow, and that floods can sweep away the best of surface work.

Pursue your task as generations of your ancestors have done before you, so perfectly, so soundly, and without a flaw, that posterity shall find as little scope for improvement on your plans, and your work, as you have on those of your progenitors.

Not long did our friend Castor and his mate work alone on the new ground—I should rather say the new waters—they had selected for their home. Speedily joined by some of the scattered members of their former colony, they proceeded to organize their operations on that extended scale which had produced in the vast Canadian streams, and probably at remoter periods in the nearer waters of our Welsh and English rivers, those remarkable constructions, the beaver-dams and beaver-huts, whence doubtless were originated the first practical ideas in the

mind of man, applicable to weirs and earthworks, for social or defensible purposes.

Shall we penetrate yet further into the past history of our race and theirs, and feel compelled to repudiate, even for those primitive inhabitants of now-civilized countries, whose only records are found in the remains of their dwellings, and their simple implements, the attribute of a pure originality of design ?

Side by side with the lake-dwellings of a bygone age dwelt the beavers, whose bones and skulls are now disinterred in company with the flint instruments and other relics of the untaught industry of that epoch. Shall we say that *they* learned no lesson in constructive ingenuity and engineering art from the creatures whose simple necessities differed chiefly from theirs in the fact that the object of the man was to raise his dwelling above the water, and that of the beaver was to raise the water to the level of his dwelling ; and therefore, while the latter laid his logs in a horizontal position, the former drove in his piles vertically, and raised his platform above them ? The appearance of the dwellings of the man and the animal—I had almost said of the animal and the man —must have been very similar, for the description of the two runs thus—

The dwellings of the Gauls are described as having been circular huts, built of wood, and lined with mud. The huts of the pile-works were probably of a similar nature, pieces of the clay used in the lining having been preserved. These fragments bear on the one side the

marks of interlaced branches, while on the other, which apparently formed the wall of the cabin, they are quite smooth. Some of those found at Wangen are so large and regular, that Mr. Troyes feels justified in concluding that the cabins were circular, and about fifteen feet in diameter. Supposing on an average each cabin was inhabited by four persons . . . *

Every man had a hut on the planks on which he dwells, with a trap-door closely fitted on the planks, and leading down to the lake. Of fish there is such an abundance that when a man has opened his trap-door, he lets down an empty basket by a cord into the lake, and, after waiting a short time, draws it up full of fish.†

The lake-dwellers followed two different systems in the construction of their dwellings, in the second of which the support consisted not of piles only, but of a solid mass of mud and stones, with layers of horizontal and perpendicular stakes, the latter serving to bind the mass firmly together. They were from three to nine inches in diameter.‡

The beaver-lodges are composed chiefly of branches, moss, and mud, and will accommodate five or six beavers together. The form of an ordinarily sized beaver's hut is circular, and its cavity is about 7 ft. in diameter, by about 3 ft. in height. The walls of this structure are extremely thick, so that the external measurement of the same lodge will be 15 or 20 ft. in diameter and 7 or 8 ft.

* Lubbock, "Pre-Historic Man."

† Herodotus.

‡ Dr. Keller.

in height. The roofs are finished off with a thick layer of mud, laid on with marvellous smoothness, and carefully renewed every year.

In order to secure a store of winter food, the beavers take a vast number of small logs, and carefully fasten them under water in the close vicinity of their lodges. When a beaver feels hungry, he dives to the store heap, drags out a suitable log, carries it to a sheltered and dry spot, and nibbles the bark away, and then either permits the stripped log to float down the stream, or applies it to the dam.

In forming the dam, the beaver does not thrust the ends of the stakes into the bed of the river, but lays them down horizontally, and keeps them in their places by heaping stones and mud upon them. The logs of which the dam is composed are generally about 7 inches in diameter.



IN THE WOODS OF CANADA.

BEAVERS AND BEAVER TOWNS.

PART II.

IT was such a dwelling, and constructed on similar principles, was the barrier erected by our energetic pair of friends, assisted by the companions who shortly thronged around them; for the social instinct is strong in these wonderful animals, and the company of their fellows seems to call out into fuller exercise the instincts and powers which in solitude seem to lie comparatively useless and inactive, except so far as to supply their individual wants.

Brought up together, these animals live in perfect harmony, and labour in concert; but, removed from such society, each can live no longer but for himself alone, and even the instinct of building suffers total extinction while the animal is kept in captivity; while

the attempt to introduce two of them under these circumstances to one another is attended with the danger of their violent combats, and the severe wounds they inflict on each other, terminating fatally for one or both.

The condition of isolation and of captivity so utterly foreign to their nature seems to paralyze every natural instinct, especially if adopted in early youth. The necessity for exertion in procuring food and in protecting its dwelling from attack, and from the effects of climate and weather, as in the human race, seems to be an absolute requisite for drawing out and educating to a full perfection not only the subtler sensibilities of its nature, but even its ordinary instincts.

The first and apparently the most arduous operation was to secure the most suitable material, not in the first place for their dwelling, but for the immense dam which was to be carried across the stream, and to secure for their base of operations a clear and undisturbed depth of water.

No settler had yet made a clearing in that native forest; no axe had rung through its silent arcades, nor had a tree fallen, save on the height where the storms had from time to time uprooted the aged giants of the wood. But now the younger trees, the saplings, were to bow their waving crests, and succumb to the slow and sure inroads made by the teeth of the four-footed invader.

These more recent growths were found in luxuriant

abundance, rising chiefly from one of those strange clearings in the forest which testify to the force of the invisible agents, which from past ages to the present time have performed in a few hours the work which now costs the axe of the backwoodsman months to accomplish. And whether it be the whirlwind, gathering force as it sweeps over miles of forest and agitates the ocean of verdure, till it meets the obstruction on a rising ground of a few aged and gigantic trunks, or whether the lightning force of an electric current, devastating the line of its viewless march, the effect is one which enhances greatly the silent sublimity of those vast solitudes—for solitudes they now are, the trail of the Mohawk, the Oneida, or the Mohican having almost vanished from among them, and the human settler having not yet made a permanent home there.

But on the spot where lay the vast trunks of upturn monsters, heaped in wild confusion,—the noble elm, with its graceful and weeping top laid low, the maple in its rich variety, the sturdy oak, stretching its roots into the air, and mingling its giant boughs with those of the broad-leaved linden,—space was thereby afforded for the struggling growth towards sunshine and upper air of many an inferior tree, which essayed to lift its modest head to a level with the surrounding surface of undulating verdure. The silvery-stemmed birch, the quivering aspen, the useful and shrubby nut-bearing bushes, which, thrown in this manner into the company of the stately and the great, proved themselves, by their utility

for the purposes which these skilful little architects had in hand, to be neither ignoble nor vulgar cumberers of the ground; these in their turn were destined to a fate differing from that which their own ambition, could its



A TEMPRST-CLEARING.

utterances have been heard, would have asked, of supplying the vacuum created, not by the lightning and the hurricane, but by the encroaching hand of advancing civilization, which had commenced the work whereby

some of the most interesting specimens of instinctive ingenuity have by this time been almost improved off the face of the earth.

Here the beavers fixed their abode; here in increasing numbers they began to nibble: sharp were their teeth and quick the fall, as tree after tree crashed down and interlaced their branches on their way. Cut afterwards into shorter lengths, they became more portable, and were conveyed, by the united strength and ingenuity of the builders, to the spot beside the waters, whence the wondrous edifice was soon to rise.

Not ten, nor even a hundred, sufficed for the work: higher and higher up the course of the stream they plied their task, never following its downward flow, but in parts of the forest whence with vast labour they rolled the nibbled branches to the stream, which floated them to the destined spot, until the foundation was laid of a barrier 300 yards in length.

Slowly rose the superstructure, tapering from a thickness at the bottom of 12 ft. to a summit of from 2 to 3 ft.

But why that strange variety in the direction of the work?

Is it possible that the master mind which seemed to guide the whole has hesitated, paused, changed its intention, and failed at length in producing that symmetry which so much united action seemed to promise? Here it runs boldly out into the river. There it takes a bend, and curves outwardly against the stream. Ah! at that very point they know that the current is the strongest;

and though they have never visited an artificial harbour, or inspected a modern breakwater, they have adopted their principle with the most consummate engineering skill.

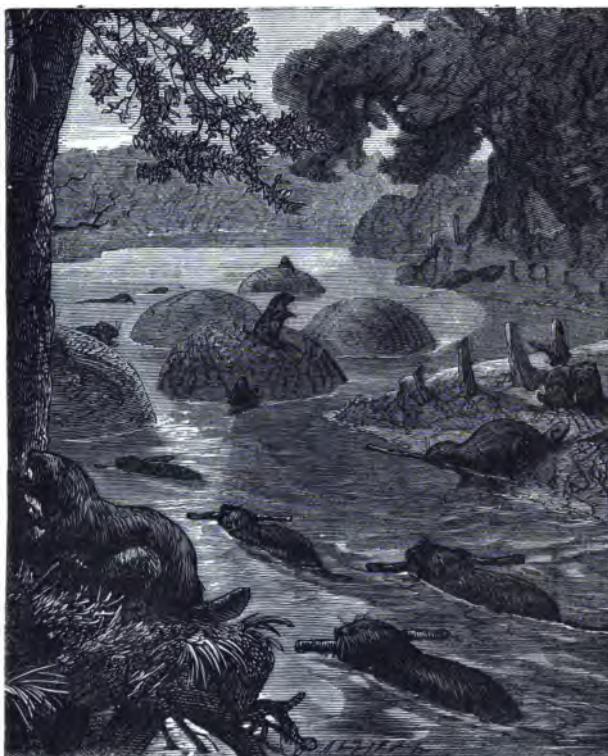
Strengthened with stones, and plastered over with mud, they have now completed the breastwork, behind which, in the artificial depths which they have created, they may calmly erect the dwellings which are to form for their growing colony, not only a cluster of compact and comfortable dwellings, but an invaluable defence against the attacks of their enemies.

Yes, experience is a stern teacher, and the new dwellings must be both commodious within and invincible without.

The thickness of their conical mansions is such, that an external diameter of 15 ft. allows but 7 ft. within, and the walls are so curiously plastered within and without, that the outer surface, hardened by the action of frost, is a model for an iron-plated man-of-war. Danger there may be beyond the walls ; for the savage foe to the beaver, as to the smaller quadruped, the wolverine, prowls through the woods in search of prey, with its jet-black fur, gigantic paws, and ivory claws ; and, but for the thickness and hardness of the roofing of the beaver huts, would even invade the privacy of their dwelling where, in neatly arranged beds, separately placed against the wall, each family of beavers spends the winter months.

A deep ditch affords additional facility of entrance and egress to the beavers, the doors of whose huts are under

water, and to whom travelling by land is always less



BEAVERS AT WORK.

acceptable than aquatic exercise ; and the store of bark, stripped from the logs they have used in building, is kept

in the lower stores of their dwelling, for the supply of their winter food.

Notwithstanding these provident arrangements, the beavers generally emerge from their winter quarters greatly reduced by hunger and extremely thin, and find it prudent during the summer to separate from each other and to seek their food alone, until the necessity of shelter during the severe season reunites them for another winter.

Not all of the beaver tribe are equally distinguished for their ingenuity and industry. Among them, as among the bees, are to be found a class, called by the Canadian trappers *les Paresseux*, or the *Idlers*.

These, the rejected and disappointed bachelors of the race, retire gloomily into burrows or tunnels on the river banks, and, having no family affections to call out their natural powers in providing homes or provision for the young, they build no dams and construct no houses, and unsuspectingly fall an easy prey to the trappers, doubtless living unrespected, and dying unlamented.

Perhaps now, as men have failed in absorbing constructive instinct through their hats, and have descended for their fabrics to the insect world, the beaver in North America may linger at least as long as his compatriot, the Red Indian, whose wigwam is indeed but a miserable parody on the comfort of the beaver's hut.

Time was, when the beaver was the first architect in the British Isles. Long before round towers had arisen

to mystify future antiquarians, the beaver was modelling his dome in the fens of Yorkshire and the mountains of Wales. But skill is not always victorious against brute force. The beaver's tail struggled in vain against the flint hatchet, and, when the Roman came, the beaver and the Briton alike withdrew to Scotland and to Wales.

They had had their day—the day when the great Irish deer, the wild boar, the roebuck, the stag, the goat, and the wolf disputed with the Briton the fens of Lincolnshire and the wolds of Berks. They were the successors of the elephant, the woolly rhinoceros, the hippopotamus, the hyæna, and the cave tiger, which had ceased to exist before the peat began to grow on the swampy plains where the beavers built their dams. It is in the peat mosses that we find the only story of the English beaver.

But in Scotland and in Wales the beaver finds a place in written history.

An old monk who writes his travels in Wales tells of the beavers in Cardiganshire, and, three hundred years later, about A.D. 1490, we are told they abounded about Loch Ness, whence their furs were exported. Still later lingered the tradition among the Highlanders about Lochaber, of the former abundance of the "broad-tailed otter" there—the very same name by which it was known in Wales. But the beaver's coat was too precious for him to be allowed to wear it in peace, for Howel the Good, when he fixed the price of furs by law in the ninth

century for the Welshmen, while he rated an otter's skin at 12*d.*, estimated the beaver's as worth 120*d.*

We know not whether the Crusaders wore them for their cloaks; but when the Archbishop of Canterbury, A.D. 1180, went to the Principality to beat for recruits, his secretary and biographer was so delighted with the beavers of Cardiganshire that, forgetting the Crusades, he can only tell us about their huts, their tails, and their teeth, and how their habitations, formed of willow stumps, so soon as the boughs begin to shoot, look like groves of trees, rude and natural without, but artfully constructed within.

But this was long ago, and all the traces the beaver has left are his name, still attached to some waters in the Principality, telling us of the home of the old family; just as in Yorkshire, Beverley, "Beaver's Legh," by its name and its coat of arms, reminds us of an inhabitant more ancient than the monks and the minster.

But as there were heroes before Ajax, beaverdom, like man, had its giants of a yet older time.

All over the northern world, from Siberia to Britain, have been found the remains of a gigantic beaver, buried in the clay with the bones of the mammoth and the rhinoceros, with teeth in comparison with which the incisors of our beaver are puny indeed—teeth which, instead of confining themselves to willows and alders, may have felled the huge pine for a morning's work, to dam some ancient and long-forgotten river.

Let us hope that our children may sometimes have the

opportunity of seeing a beaver-dam even nearer home than the rivers of Arctic America.

One enterprising proprietor proposes to reintroduce the beaver in Staffordshire, where, let us hope, the intelligent builders will learn that plantations are not forests, and will exercise no right of free forestry beyond the domain of their kindly patron. A few beavers still linger on the Vistula and other rivers of Russian Poland.

There are many living who remember several colonies in Norway, but it was supposed that the Norwegian parliament, when thirty years ago it passed a law imposing a heavy fine on any one who should kill a beaver, was acting on the old maxim of locking the stable door when the steed was stolen, for years had passed since a beaver had been seen in the land. It seems, however, that one family, perhaps only a single pair, had contrived to escape observation in a sequestered forest of Southern Norway. Unknown and unobserved, the family increased; they judiciously selected almost the only vast estate left in that democratic land.

Its proprietor kept the secret, and three years ago introduced a delighted and astonished English professor to a thriving colony in a sequestered *Dahl*. In spite of his enthusiasm, it is to be feared that the professor's zeal for his University Museum might have overcome his respect for Norwegian law—at least the temptation would have been strong—had he not, by strange good fortune, lighted on the unburied remains of an aged beaver, who had died in peace by the side of his village, and whose



A BEAVER TOWN.



skeleton is now honourably entombed, with other gaunt specimens, in a palace of science.

But the living beaver may be studied still nearer home.

The interesting Canadian family in the Zoological Gardens, though not allowed to indulge their taste by building a dam across the Regent's Canal,—a feat on which they seemed to have set their hearts, having more than once surreptitiously made nocturnal surveys, rudely interrupted by London barges,—have had to content themselves with building a hut of most inferior materials in a mere paltry pond.

Even here, however, they contrived to elude the pertinacious inquisitiveness of keepers and sight-seers into their domestic privacy. Safely housed under that cumbersome dome, which they had been obliged to construct,—not of the neat willows their native taste would have selected, but of such rubbish as was within a captive's reach,—they have reared a little beaver family, of the existence of which no one was aware, until the necessity for extra-mural sepulture compelled them to deposit the remains of a little one on the edge of their prison; and a few days afterwards the watchful mother introduced her surviving offspring to the glories of sunrise on a summer morning.



IN THE FOREST OF THE UPPER
AMAZON.

WITH ITS ANIMAL LIFE.





IN THE FOREST OF THE UPPER AMAZON.

WITH ITS ANIMAL LIFE.

PART I.

THE little town of Ega, on the Upper Amazon, in the heart of South America, a thriving Brazilian settlement, lies pretty nearly in the centre of the most extensive unbroken forest on the surface of our globe.

It requires little effort of imagination, even to those who have not travelled beyond the limits of Europe, to form some general idea of what such a realm of arboreal vegetation must be; lying within a few degrees of the equator, bathed all the year through in an atmosphere like that of a forcing-house for plants, drenched by tropical rains and heated by a vertical sun.

The total length of this vast forest, from west to east, is 1260 miles; its breadth varying from 600 to 800 miles.

Towards the east, indeed, it continues 700 miles further, terminating only on the shores of the Atlantic. This easterly portion, however, or that which clothes the valley of the Lower Amazon, I exclude from the present description, since it is, in one part, much broken and contracted in breadth by large tracts of open grassy land.

The forest of the great plain of the Upper Amazon has sufficient compactness and peculiarity to be treated of as a separate area: as there is no complete break of continuity, the statement of Humboldt (who had a glimpse of the immeasurable wilderness only from its western commencement, in Peru) still holds good, to the effect that a flock of monkeys, might travel amongst the tree tops, were it not for the rivers, for 2000 miles in a straight line without once touching ground; namely, from the slopes of the Andes to the shores of the Atlantic.

It is in the region of the Upper Amazon that the most characteristic features in the animal life of this great wilderness are to be seen; and no better station for a traveller's head-quarters can be found than our little settlement of Ega. I made it my chief place of residence during four years and a half, employed in investigating the natural history of the district.

It is built within the mouth of the Teffe, one of the large tributary streams flowing from the south,—a river of clear, dark-green water, which, after a course of some two or three hundred miles, on reaching the middle part of the level country, spreads out into a lake-like expanse,

five miles broad, and finally creeps into the trunk stream by a narrow channel a couple of hundred yards wide.

The population of the town is about 1200 souls, and consists chiefly of half-castes and Indians; many of the former being educated persons, ambitious of being thought civilised and fond of showing hospitality to strangers. Few pure whites reside in the place, but amongst these are four or five stray Frenchmen and Italians who are settled here and married to native women.

To complete our brief description of the place, it is necessary to mention that it ranks as a city, and is the centre of a comarca or county; and that, although the remotest county town in the Brazilian empire is distant 2,800 miles from Rio Janeiro, the authority of the central government is as much respected, and the municipal, educational, military, and ecclesiastical details of management as closely observed, as though it lay within a few miles of the capital.

At the top of the grassy slope on which the town is built, rises a compact wall of foliage, with a small narrow gap in its midst: the leafy barrier is the frontier line of the forest, kept from encroaching on the few acres of cleared space only by the inhabitants doing constant battle with the powers of vegetation, and the gap is the entrance to the only road by land that the townspeople possess.

A few minutes' walk under the shady arcade, and the traveller finds himself in the heart of the solitude. The

crowns of the tall trees on both sides meet overhead, and admit the rays of the sun only at rare intervals, where some forest monarch has been uprooted by the storm. The path leads to a few small plantations belonging to the poorer inhabitants, and at the distance of about a mile dwindles into a mere hunter's track which none but a native can follow.

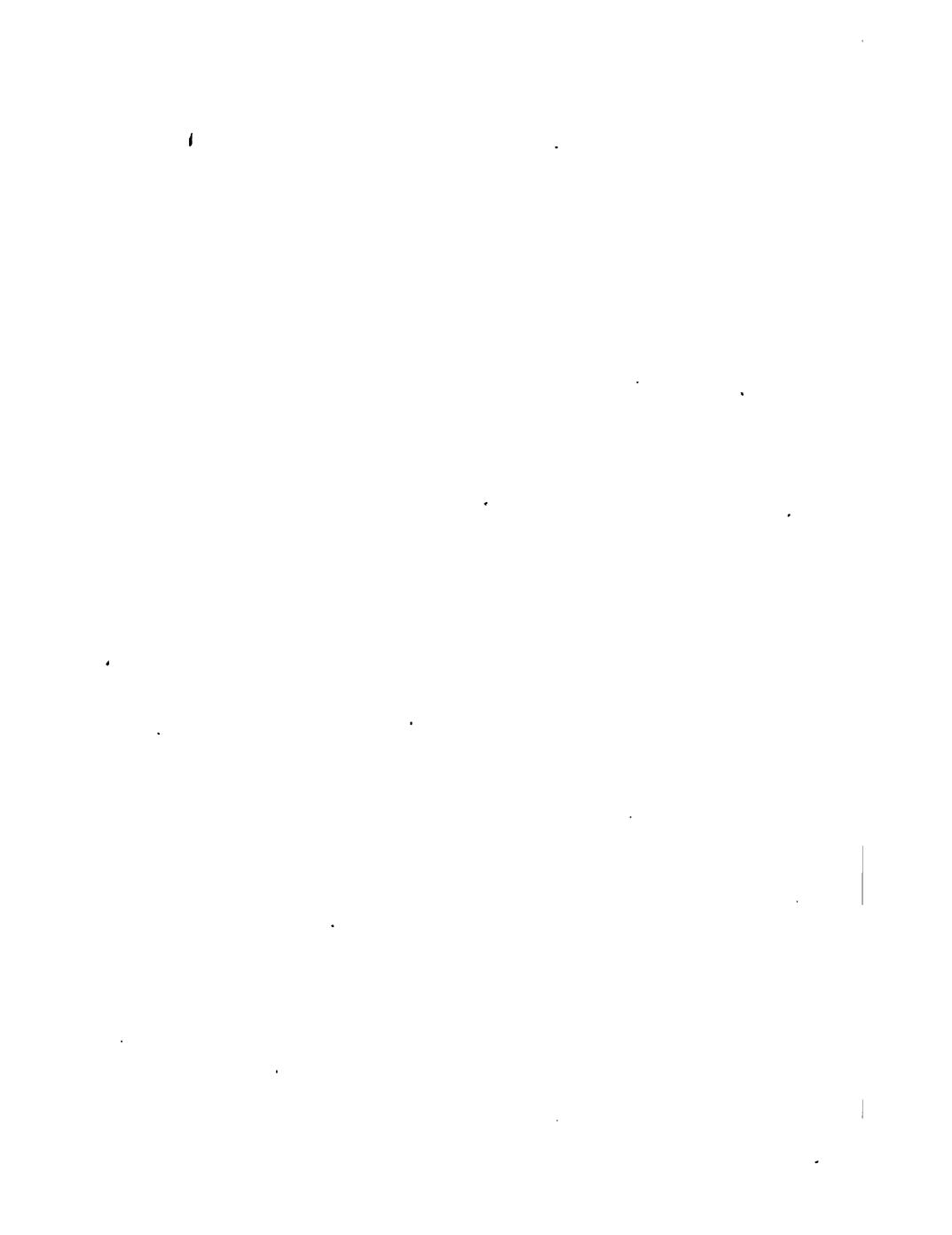
Beyond this point all traces of the presence of man cease,—the land untrodden and unowned,—and so it continues for hundreds of miles.

To enable my readers to form some idea of the animal life harboured in the warm and teeming shades of this great wilderness, I will invite them to accompany me, in imagination, on an excursion into the untrodden solitudes lying beyond the mouth of the Teffé. Let us accept the invitation kindly offered by an old friend of ours—an experienced woodsman, named Lauriano—who is about to start on a journey to collect sarsaparilla in the retired channels leading to the river Jurua, some thirty miles to the west of Ega, and says he will be glad of our company.

We are but humble naturalists, and have no means of supporting an establishment of Indians of our own, even if they were willing to stay with us, which they would not be, as they prefer the service of traders like our friend, who has canoes and merchandise, and offers plenty of excitement of the kind which the redskin loves,—journeys months long and a crowd of hands to share the labour of paddling. All that Lauriano requires of us is a small contribution towards the expense of provisions.

THE MOUTH OF THE AMAZON.





We can return, as we propose, at the end of a week, for he will have occasion to send a canoe to Ega about that time. The opportunity is too good a one to be lost.

Lauriano is a half-caste, and his wife, Perpetua, who accompanies us, is a pure-blood Indian, but has an oval European face, regular features, and quiet obliging manners; on her we may rely for well-cooked and regularly served meals. They have no children, but take with them two young nephews, whose father, Manoel, also belonging to the expedition, has gone forward some days previously to the place fixed upon, with a view to prepare the first encampment. These, with an ugly, broad-faced, taciturn old Indian woman and four stout lads, make up the whole of Lauriano's party.

We ourselves take with us only our Indian servant, Sebastian, a dark-skinned young savage, recently brought from a remote village of his tribe, who will be a useful companion in the jungle. Two small chests, one containing provisions, such as tea, coffee, sugar, biscuits, and so forth, and the other materials for preserving specimens and store boxes, a large bundle containing our hammocks and mosquito tents, and, lastly, a canvas bag with change of clothing, constitute the whole of our baggage.

The glowing sun has set behind the dark-green wall of forest; the short twilight is past; the last flock of squalling parrots has crossed over the village in going from their feeding to their roosting places; the howling monkeys have vented their last bellow for the evening,

and we sit at the door of our cottage waiting for the summons to embark. But we wait in vain, and are becoming tired of listening to the melancholy hooting of owls, and the duets of night-jars, stationed at a distance from each other on the borders of the forest: so we



AN INDIAN CANOE.

proceed to the house of our friend to ascertain the cause of the delay.

On approaching the dwelling, we perceive lights gleaming from the windows in the pitchy darkness of the night,

and hear sounds of music and merriment within. Lauriano, with the usual easy-going habits of his class, seems to have forgotten all about the voyage. We find the large mud-floored chamber full of company, a couple of wire guitars jingling in a corner, and a sort of ball going forward, Lauriano himself being in the act of dancing a fandango, with his wife as partner, in the centre of the room. A number of people, women and men, are squatted around, smoking out of long wooden pipes and waiting their turns to stand up in the jig.

It is useless remonstrating with the good-natured folks for their want of punctuality, for it is the habit of the country to postpone business to pleasure, so the best thing to do is to take the proffered cup of coffee, trust in the assurance that we shall start in the morning, and go home, re-sling the hammock, and have a good night's rest.

Just as day is beginning to dawn, a rap at the door arouses us, and two strong lads are soon carrying our heavy boxes down to the beach. We sling our gun, nets, and game-sacks over our shoulders, hand the shot-belts and a bag full of small boxes and miscellanea to our dusky little follower, and are quickly at the water-side. The canoe, a large and stout-built boat, with mast and two arched awnings of wicker-work thatched with palm leaves, is pushed off, and the Indians, with their battle-dore-shaped paddles, begin to propel us quickly along. Lauriano and his wife seem sleepy after their night's revelry, and do not interrupt our quiet enjoyment of the noble river scenery amidst which we are travelling.

We glide along close to the banks, and note the infinite diversity of foliage of the lower trees and the variety of creeping plants which drape the water-frontage of the forest as with a mantle.

We hear scarcely any sounds of animals.

A loud splash in the water under the shade of over-hanging trees occasionally startles us. This is produced either by large fishes of the Salmonidæ family (Tambaki) rising to seize fruits that fall from above, or by heavy lizards or snakes suddenly dropping in alarm from the boughs as we brush past. A faint chorus of singing birds, at times, reaches the ear from a distance, and aloft is heard frequently the cawing of parrots, but as the morning is fine and calm, the travelling flocks pass at so great an elevation that the sounds are scarcely perceptible.

Although animal life does not make itself very obtrusive by its noises, nor disturb the feeling of intense calm and solitude which soothingly creeps over the mind, there is no lack of signs of its presence to the sight.

What are those strange figures, like human head and shoulders, which suddenly pop up here and there above the glassy surface of a quiet bay as we round a wooded point? They stare for a few moments at the approaching canoe, and then quickly disappear again under the water. These are otters, of a peculiar large dark-brown species which tenants all the still by-streams of the Amazonian system. They are so shy that it is almost impossible to get within gun-shot of them, and we very rarely see a

skin in the possession of the natives, although the animals are extremely common.

We pass also, throughout the day, a continual succession of huge alligators, never very closely, however, for they are exceedingly wary. A huge scabby carcase, or rather a double lump—the top of the head and back—is seen at a distance, resting like a floating log on the



BANKS OF THE RIVER.

water. You may rely upon it the monster is eyeing us very closely, for, if the prow of the canoe is turned but for a moment in his direction, a little movement is perceived towards the tail part of the animal, and the beast is gone from the surface.

The season in which we are making this journey—the end of January—is perhaps the pleasantest time of the year.

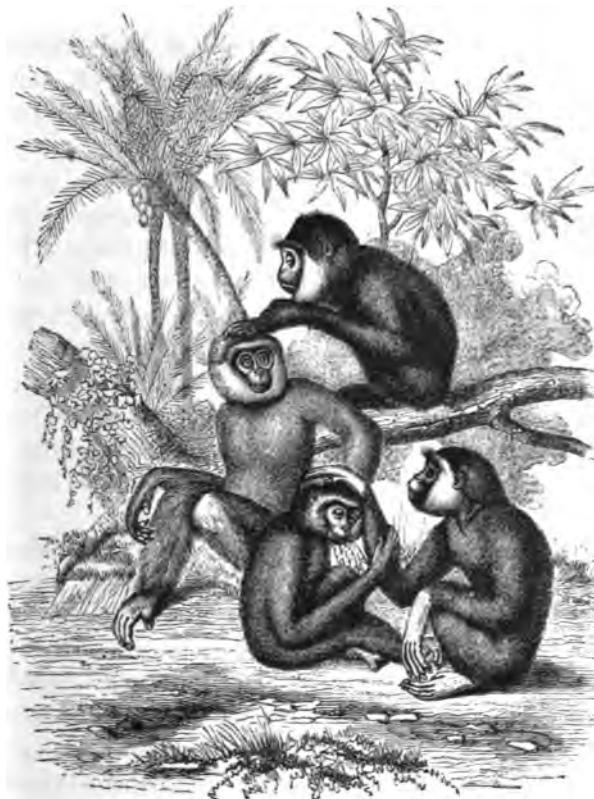
It is the commencement of the second summer, the "Veraõ do Umari," as it is called by the inhabitants. The scorching dry season, or the summer proper (June to October), during which the river and its by-streams and lakes sink to a level of 40 ft. below the high-water mark, is long past, and the heavy rains of November and December have clothed all the banks, left bare by the retiring waters, with a mantle of verdure, besides raising the water level some 20 or 30 ft., and brought a period of fine weather and cool air and refreshing winds. Mosquitoes and all other insect pests along the banks of the rivers are much less numerous; whilst, on the other hand, animal life in the shades of the forest, or on its borders, is much more active than in other seasons.

On entering the main Amazon we notice that the waters have already commenced to sink again; flocks of white terns are flying over the shallow places, and troops of sandpipers and plovers, some with bright red legs and white and black plumage, are coursing along the edges of the sand-banks.

The present is the season of ripening for many kinds of wild fruit, and the hosts of richly plumaged, fruit-eating birds, which in other months are scattered sparingly over the whole region, flock to the places where the fruit-trees grow.

On the morning of the second day of our journey, just as we have crawled from our sleeping-place under the palm-thatched awning of our canoe, we behold, on the opposite side of the sluggishly rolling, turbid stream of

the Amazon, here three miles broad, a wide gap in the



THE SCARLET-FACED MONKEY.

low, dark line of forest that bounds the view. Within

the space stretches a vacant horizon of water and sky, dotted on one side only by a broken line of trees vanishing in the distance.

This is the principal mouth of one of the great tributary streams, the Japurá, which, rising 800 miles off, in the Andes of New Granada, here blends its waters with those of the king of rivers.

The low wooded land to the west is the abode of the scarlet-faced monkey, one of the most singular of the animal tenants of this region. It is of moderate size, has a long coat of glossy white hair, and a face of so vivid a hue that the animal, at a short distance, looks as though some one had laid a thick coat of vermillion paint on his countenance. One of its most remarkable features is its short, stumpy tail; all the other monkeys of the New World being distinguished by the length and flexibility of this member, which, in most of them, serves as a fifth hand in climbing.

It might be thought, on this account, that the species has some near relationship to the short-tailed and tailless apes and baboons of the Old World, which live on the ground; but it has no further resemblance whatever to these Old World groups, being in all essential points of structure a species of the New World type of monkeys, and, like all its relatives, an exclusively arboreal animal.

This singular creature is much sought after by the people of Ega; its grotesque appearance and confiding habits, when tame, making it an acceptable present to offer to a distinguished personage, such as a judge or

president of a province, whom the subordinate authorities of the town wish to propitiate.

It is found in no other part of America than the tract of low land we now see before us, and is there limited to an area of a few score miles in circumference. It travels in small bands along the boughs of the lofty trees, generally at a height of 80 ft. or more from the ground, and the hunter, stumbling amongst the rotten logs and entangled underwood of the gloomy shades beneath, has great difficulty in getting within shot of the flocks.

The weapon used is the blow-gun, a wooden tube 8 ft. long, through which, when at last a steady aim can be taken, the Indian propels with his breath a little poisoned arrow; the poison is previously diluted with water, so that there may be no difficulty in reviving the animal when it falls wounded into the arms of its persecutor.



IN THE FOREST OF THE UPPER AMAZON.

WITH ITS ANIMAL LIFE.

PART II.

LAURIANO, who knows the Japurá well, has many stories to relate of his adventures amongst the tribes of warlike Indians which people its banks, and these beguile the way until breakfast time, when we look out for a nice shady place in-shore, where to land, make a fire, and cook our breakfast.

Whilst the fire is being made and the slabs of salt fish washed and cooked, our companion, wishing to obtain a little fruit to serve as dessert to our uninviting breakfast, takes us by a faint track through the thicket to some wild-fruit trees, the situation of which is known to him, as the place is regularly frequented by the Ega people

for the purpose of collecting Brazil nuts in March and April.

The distance is not more than about a furlong, but from the difficulty of the path, the necessity of cutting our way with our hunting-knives through the mazes of woody lianas, and the numerous detours we make round the denser parts, it seems more than a mile. In the end we find ourselves again on the banks of the inlet, at a place where it is much broader than at the mouth. On the opposite side there is a tall tree, the branches of which are ruddy with fruit—a sweet berry called *pamá*: as we look at it a number of birds of a bright scarlet hue are seen gambolling and chasing each other. It is a flock of black-throated tanager, a handsome species which abounds in these forests. Other trees of the same kind rise near to the place where we are standing, and signs of the presence of many birds are manifest in the subdued chattering and fluttering, and in the continual shower of berries falling around us.

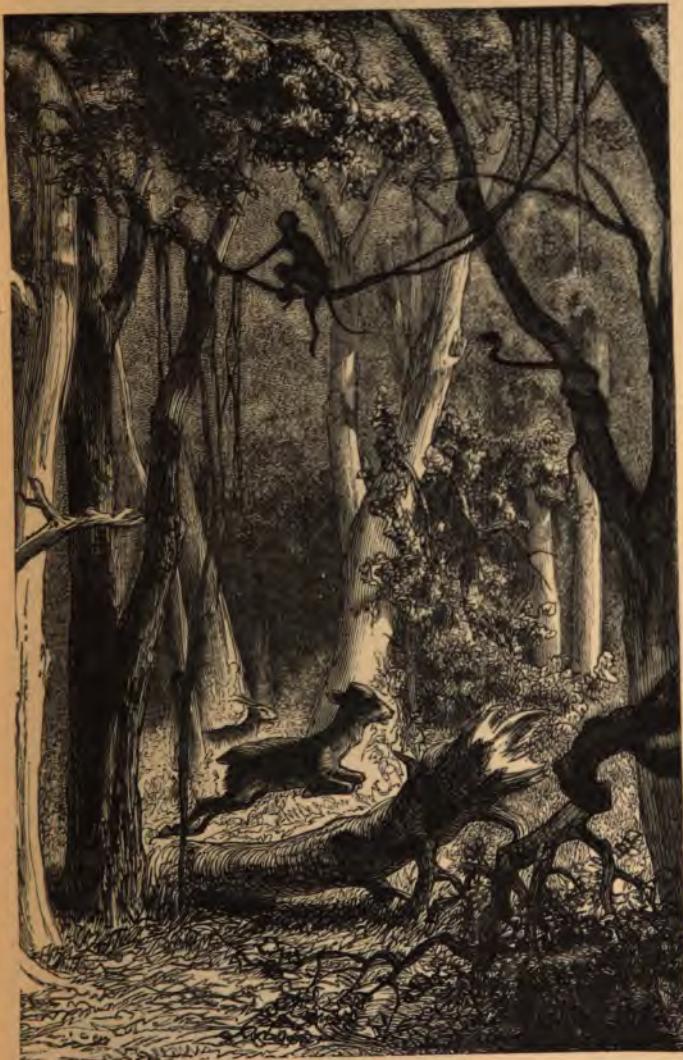
This, then, is one of the places where the handsome fruit-eating birds of the country love to congregate. We find great difficulty in getting a distinct view of them, owing to the density of the intervening canopy of lower trees; but after remaining quiet for a short time, our patience is in some measure rewarded. Parrots and toucans appear to be the most numerous; the latter distinctly visible only when hopping along the boughs in going from one part of a tree to another, and the parrots when quarrelling and driving some weaker com-

panion from the thick cluster of foliage in which the flocks are concealed.

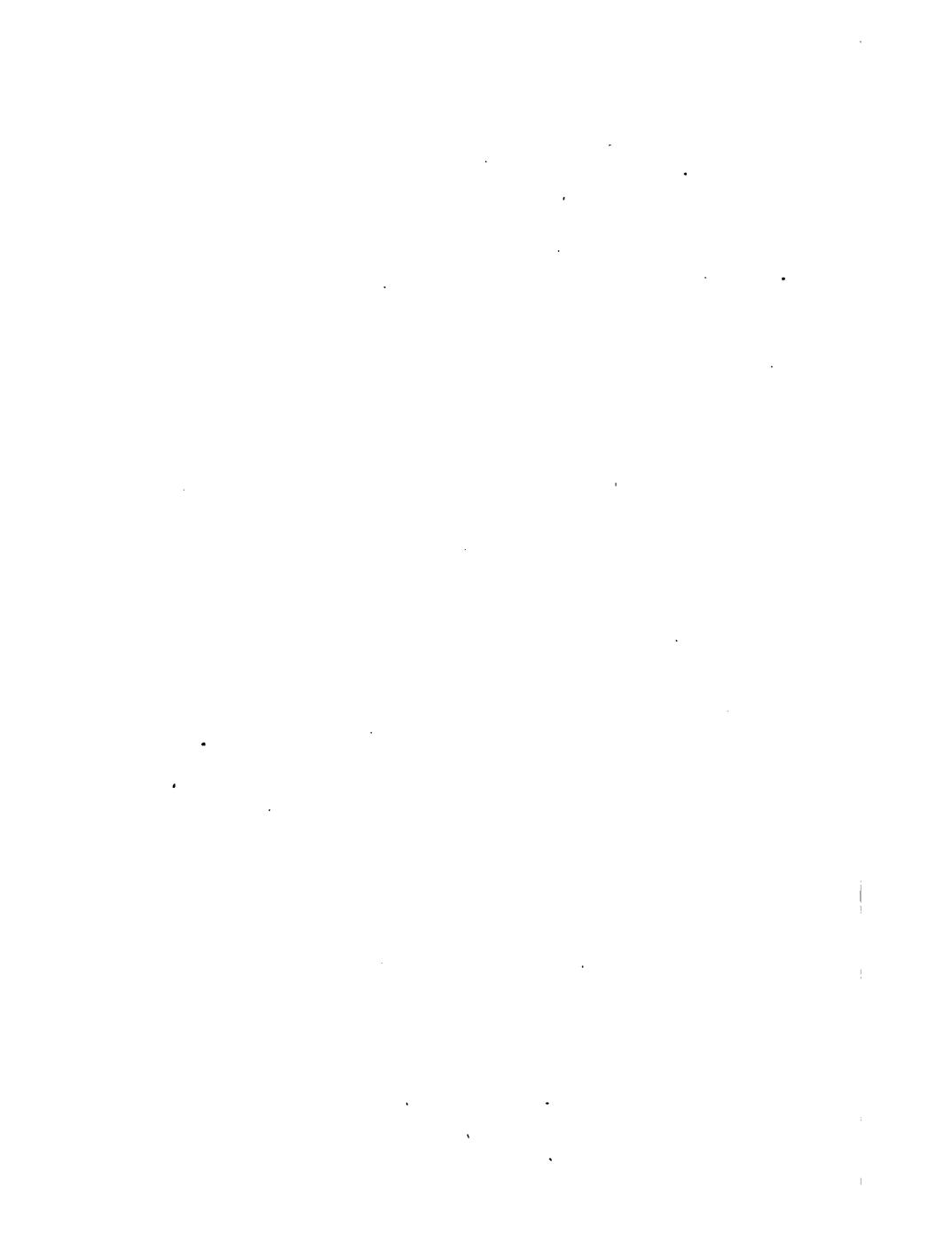
The sight of a toucan, with its monstrous beak ornamented with bright colours, is alone sufficient to give the scene a strange exotic aspect. We can distinguish easily two kinds on the trees—one of very large size, with white and yellow breast, and crimson and saffron-coloured plumes near its tail, and the other not larger than a jackdaw, of an olive-green shade, with silky black breast, banded with yellow.

Let us watch closely the movements of that grotesque stealthily moving fellow, with the beak half a foot, at least, in length. He hops from the large bough to a slender branch, steps along the latter as far as it will bear his weight, and then, eyeing a bunch of fruit that is apparently out of his reach, stretches forth his long body and neck, in vain attempts to seize it. He seems in the act of falling off his perch, but recovers himself by beating his wings : he has secured the fruit, and, stepping backwards, tosses up his head and lets the juicy morsel slide down the ungainly bill into his oesophagus. The purpose of the long cumbrous-looking beak is now easy to divine ; it is to enable the heavy glutinous bird to reach, from a firm perch, the fruit that lies at the end of slender twigs, which, were his beak of the ordinary size, would be inaccessible to him.

All the parrots we see are of a light green colour, a hue which serves them as a disguise and protection against their enemies, for it renders them almost indistin-



AN OPENING IN THE FOREST.



guishable amongst the masses of foliage. There are evidently many distinct kinds on the trees, to judge from size alone ; for some of them, the noisiest of all, are not much larger than sparrows (the *perroquito do Espírito Santo*, or parroquet of the Holy Ghost of the natives),



THE PARROQUET OF THE "HOLY GHOST."

whilst others are giants in comparison, and one kind shows bright patches of scarlet in its plumage.

Besides tanagers, toucans, and parrots, we can distinguish many other species of birds less conspicuous

in shape and colour: amongst them numbers of elegant little creatures of dark blue and green hues, with yellow legs, allied to the honey-eaters, and one large coal-black species, which we descry hopping singly among the boughs, and which wears a patch of rich crimson on its breast.

But we cannot delay any longer in this interesting spot, for a loud halloo, from the direction of our encampment, announces that breakfast is ready; so Lauriano mounts nimbly up one of the lower trees, cuts off two or three of the heavily laden branches, and, with these, we trudge back to the canoe.

Our breakfast finished, we again embark, and continue our voyage.

The weather is magnificent—sunshine, without a cloud; and a light easterly breeze is blowing, which moderates the heat of the sun. Towards mid-day, the wind strengthens, and we then hoist our sail, and bowl along merrily, keeping always near the southern bank, where the current is generally slack.

In gliding along the quiet waters of this part of the coast, we surprise a small herd of capybáras, a strange kind of rodent animal of very large size and compact form, with a face like a rat, webbed feet, claws in the form of hoofs, and a rough coat of long bristly hair. It belongs to a group peculiar to South America, which seems partly to connect the rodent order of mammals with the pachyderms—the hare and rabbit with the tapir and rhinoceros.

The capybára takes readily to the water, and dives well; if we were to approach the herd from the land side, the animals would be sure to plunge into the river, and secure their retreat by diving and swimming; but now, on perceiving us, they simply turn round and enter the forest. The gap through which they disappear is evidently an old one; and this, together with the laid



THE PACA.

condition of the grass and other signs, shows that the animals are in the habit of emerging from the shades to sun themselves, or feed on these grassy terraces.

Two other large rodents, near relatives of the capybára, also abound in these forests, namely, the páca, a species intermediate in size and appearance between the hog and

the hare, and the cutia, similar to the páca but smaller in size, of which there are several distinct varieties. Both take to the water when closely pursued, but they are not so decidedly aquatic in their tastes as the capybára. They live in the forest, in burrows which they excavate amongst the roots of trees, and come forth to feed on fallen fruits only in early morning or on moonlit nights.

We arrive at our destination a little before sunset: the place of encampment of the sarsaparilla-collectors is distant several miles within the mouth of a shady by-channel, which communicates with a network of lakes and streams forming a portion of the outlets of the great tributary, the Juruá. Leaving the broad stream of the Amazons we paddle for an hour or more along a narrow, echoing passage, hemmed in between two lofty walls of forest, and then turn up a still narrower and shadier channel, which we follow for a mile or so, and in the end find it suddenly expanding into a spacious pool, a couple of miles in circumference.

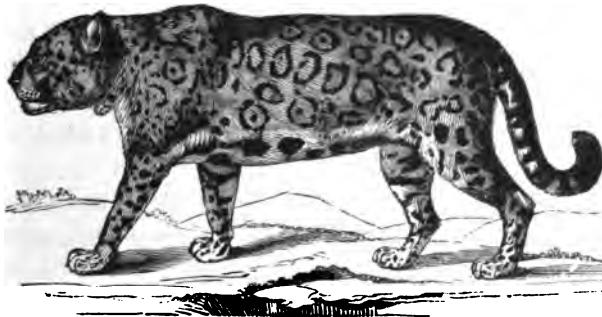
At the farther end of this solitary sheet of water the land lies low, and the water is covered with masses of aquatic plants, swarming with ghostly wading-birds; but in the remainder of the circuit the banks are high, with a gradual slope, and the shore is scooped out into a succession of little bays fringed with beaches of clean white sand. A sombre but richly varied forest encompasses the whole.

We have not proceeded far before we descry a thin

column of smoke winding amongst the trees ; then is heard the barking of dogs, and soon after we glide round a projecting point of land, and see, in the corner of a snug little harbour, the canoes, tents, and fires of our friends.

The situation chosen by Lauriano and his party for their operations seems a very good one.

It has not been worked by sarsaparilla-gatherers for many years : the forest on the higher land is not filled with impenetrable thickets, so that the men can scour it for



THE JAGUAR.

many miles in all directions in search of the plants. Besides, when the ground is exhausted, the different channels of the river lie very convenient for removal to other suitable spots, still further in the interior.

Game is plentiful : of this we have immediate proof in the slabs of tapir meat which are now roasting for supper, transfixated by wooden spits secured by one end in the ground and slanted over the fire, and in the numbers of

smoke-dried quarters of the peccary or wild hog lying on wooden stages elevated over the smouldering embers of other fires. In reply to our questions concerning the tapir, Manoel, Lauriano's partner, a broad-set, middle-aged man, three parts Indian, tells us that the animal whose remains were being cooked had been killed in a singular manner two days previously.

It had rushed into the encampment in the dead of the night, tearing through the mosquito-tent of one of the Indians, tossing him out of his hammock, and scattering the burning wood of the fires in all directions. The men were, of course, aroused ; and thinking, as is always the case in nocturnal alarms, that a jaguar was the cause of the uproar, seized each the first weapon they could lay their hands on.

Flight is never thought of by the stolid, unexcitable Indian. Manoel himself grasped a harpoon, and, as the infuriated beast was advancing towards him, drove the iron with great force into his breast, after which he was soon dispatched.

Tapirs, although common in these forests, are scarcely ever encountered by hunters in the daytime, so that we have little chance of seeing anything more than the foot-marks of this largest of the tropical American mammals in our wanderings.

We sup heartily on the roasted tapir meat, which we find of very rich flavour, something between pork and beef, and then, after arranging our plans for the morrow, retire to our hammocks, slung between trees or poles

fixed in the ground, under rude sheds thatched with palm leaves.

In the morning, a little before dawn, the encampment is all alive again.

Perpetua and her morose Indian servant, who bears



A PALM-THATCHED HUT AND HAMMOCK.

the classical name of Eleuteria, prepare the coffee, and the men go down for a refreshing plunge in the lake. Before the sun is well up above the high wall of trees, the various parties are told off for the day's work, and

depart to search the woods in various quarters for roots, each person taking with him his provisions for the day, his hunting-knife, and his gun.

Manoel and Lauriano intend making a longer excursion, to explore new ground, and we, with our little helpmate Sebastian and one steady adult Indian, are to accompany them.

Our course lies southward, straight for the heart of the forest.

The early morning air strikes almost cold in the twilight shades, as we enter on a low, moist tract, after crossing the elevated land bordering the lake. We follow, for the first hour or two, the tracks made by the men on previous excursions, and at the end of that time, finding the paths becoming very faint and uncertain, begin to mark our road by breaking off branches of the lower trees at intervals of a few yards.

The underwood is not very dense in these forests of the *terra firma*; a few dwarf palm-trees, saplings, and bushes of mimosa, with occasionally a group of tree-ferns, only dotting the narrow spaces that lie between the trunks of the taller trees. These latter, however, rise very close together, and all of them, the slender stems as well as the monstrous trunks, 20 to 40 feet in circumference, shoot up perpendicularly to a height of 60 feet or more before sending out a branch, their crowns intermingling and closing in above, so as to shut out the light of day.

There is no regularity or distinctness in the masses of foliage and branches overhead: in very few cases can



THE FOREST.

G



the individual tree be traced, stem and crown, for the delicate feathery foliage of one kind is inextricably mingled with the laurel-shaped leaves of another, or the huge palmate forms of a third; and, to increase the confusion, branches and strings of parasitic and climbing trees span from one tree to another, interweaving their different forms of leaf with the varied greenery of the rest.

Through the dark, mouldy, silent shades beneath we trail our way, seeing no living object but a tortoise, which Sebastian secures with lianas and slings over his back, until we reach the banks of a rivulet, where we halt for a short time.

We can see, on the opposite bank of the stream as we descend the slope, a cluster of scarlet and blue macaws hanging about huge bunches of fruit, under the crown of a stately palm-tree; a harsh cawing is heard in other directions: the place evidently abounds in these large and richly coloured parrots. We unsling our guns, lower our voices, and walk stooping in the shade of the underwood towards the spot.

It will be better for us, however, to let the three men follow up the chase, for there, a little further on, is a pair of birds seated aloft on a naked branch, more worthy our attention. They are two species of ampelis or chatterer, a group comprising some of the handsomest of the feathered tribes to be found in the forest; one of them of a dark purple hue with snow-white wings, and the other of a beautiful light blue colour.

We are about to leap the narrow brook in pursuit of them, when Sebastian calls our attention to another object—a little sooty-black monkey with white mouth, which lies over a bough not far above our heads, and is staring and grinning at us with an air of great curiosity. On our returning the stare, it soon takes alarm, and runs off, followed by two, three, four of the same kind.

The impish-looking troop has not gone far before the foremost utters a sudden scream and falls headlong to the mass of foliage beneath, followed by its companions. It has doubtless encountered the glittering eyes of some serpent coiled round the branch, for no other possible enemy is seen or heard to account for the panic.

The effect of the noise, however, is to alarm our chatteringers, for they are gone; and if we wish not to return empty-handed, we must follow that flock of chirping birds which have also been started from their feeding-places by the same scream. We soon come up to the tree on which they have settled, and picking out one of the band, fire, and down it falls.

What a pleasant surprise! It seemed some dull-hued finch at that height, but now that we hold it in our hands we are dazzled by its exquisite beauty. Head golden-green, back half velvety jet half bright scarlet, breast light blue, and throat purple:—it is the *sete cores* of the natives, the seven-coloured tanager, one of the most richly coloured species of its genus, which is amply represented in this part of the country.

Our firing has scared away the remainder of the flock,

and, being succeeded by two other loud shots from our companions, the whole animal population of the vicinity has taken flight, amidst a piercing din of alarm notes.

The result of the shots of our two friends is not alike in both cases, for Manoel has brought down, instead of a bird, a large, heavy, grey monkey, with black wrinkled face, for all the world like that of an old negro. It is the barrigudo, or big-bellied monkey, of the Portuguese colonists, a species belonging to a numerous group peculiar to tropical America, all the members of which have long muscular tails, with naked palms underneath the tips, to fit them for a fifth hand in climbing.

The poor animal is scarcely yet dead when its limbs are bound and its palpitating body slung over the shoulders of our Indian attendant.



IN THE FOREST OF THE UPPER AMAZON.

WITH ITS ANIMAL LIFE.

PART III.

WE resume our march, tracking our way over a gently undulating district beyond the rivulet.

Our progress, however, is now much slower, as Manoel and Lauriano spend much time in examining the ground for sarsaparilla plants, their number seeming to increase as we advance.

The plant is a climber, found always in the shade of the lower trees and bushes, to the branches of which it clings for support. The stem is green and spiny, somewhat resembling that of the bramble of our own country, but it grows straight upwards from the ground, and the leaves are oval and strongly veined. The roots, which constitute the drug, grow horizontally for many yards

within a few inches of the surface of the ground, and are very difficult to dig up without breaking: yet this must be done, for, if collected in fragments, it is much lessened in value.

We cross, in the course of another hour's march, two more brooks.

On the banks of one of these we start an inambú from its nest, and shoot another bird of the same species as it is trotting along the slope. The nest of the inambú is simply a hollow place smoothed out at the foot of a tree; but how beautiful are its eggs, almost as large as a hen's, of the texture of porcelain, and of a clear light blue colour!

It is impossible to go far in any part of the forests of the Upper Amazons without seeing these birds, of which there are many distinct species. They have the habits and also the general appearance of partridges, near to which they are usually classed in natural history works; but, according to a recent investigator of high authority, Mr. Parker, they are in reality more closely allied to the ostrich group than to the gallinaceæ, being struthionous or ostrich-like birds of dwarfed size and forest habitat, which have merely a superficial resemblance in form and colour to the partridge and grouse families.

On the banks of a fourth and broader rivulet we make halt, and eat our frugal dinner.

It is now past mid-day, and the glowing vertical sun pierces the thick canopy of foliage, making the air warm

and oppressive in the shades beneath. We have walked perhaps nine or ten miles from the encampment, and are now in the very core of the wilderness—in a part probably never before trodden by man.

There is a lull in the movements of animal life on the sunny borders of the brook, and the only sounds heard are the reedy notes of cicadas and the tapping of a large red-headed woodpecker on a hollow tree.

The insect world, however, appears to be more active now than in early morning.

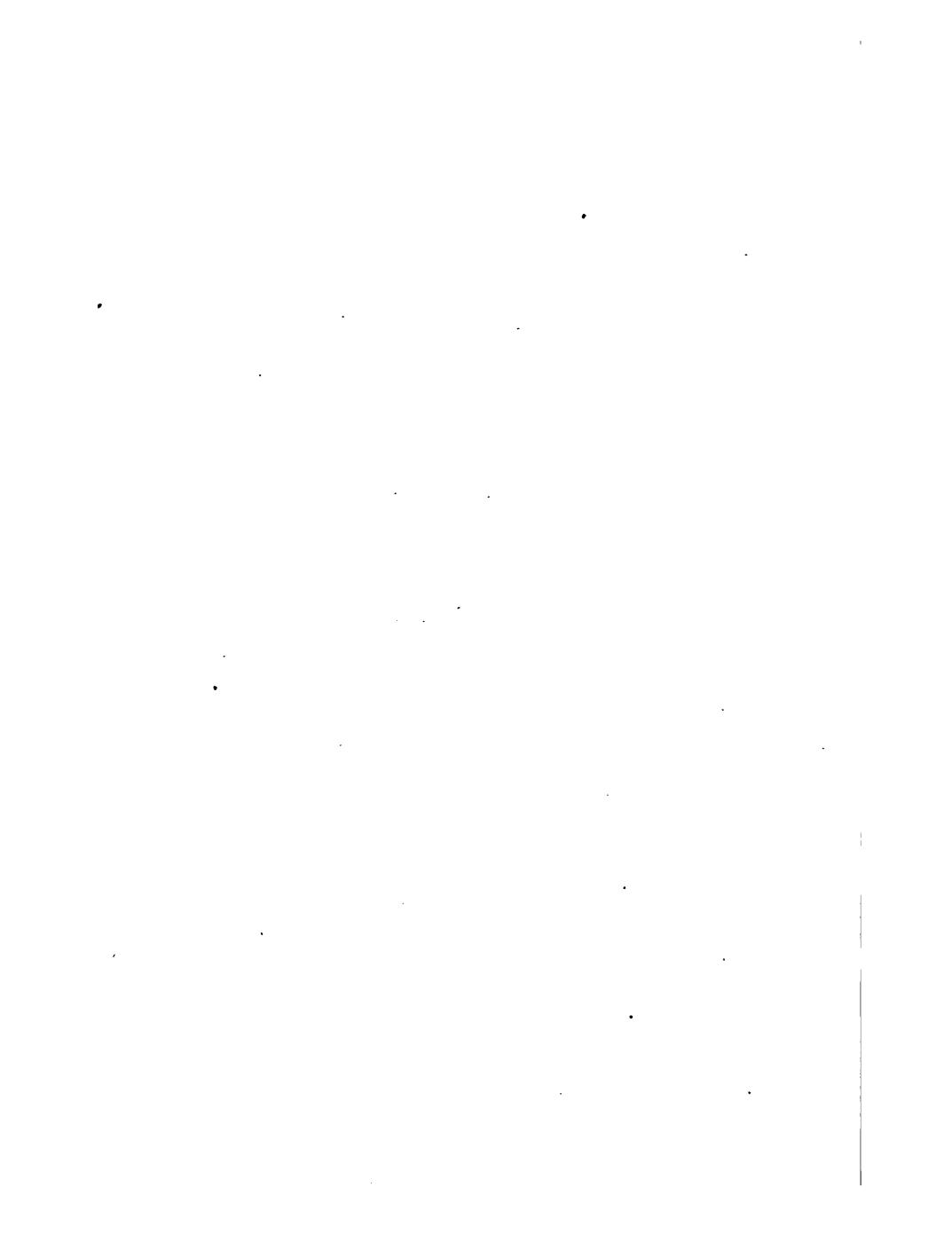
We can see from our dining-place on the top of the sloping bank numbers of huge blue butterflies, which are more than half-a-foot in expanse, sailing with outstretched wings across the sunny spaces between the crowns of trees; and many smaller kinds, some of a glowing scarlet hue, others of a rich purple, are darting about or settling on the ground close by us.

There is a tree-trunk a few paces off which seems very attractive to these creatures. A sweet sap is exuding from cracks in the bark, and a great crowd of most varied and handsome insects surrounds the places; all the butterflies having their wings closed, and packed together as close as they can stand. One kind has large spots resembling the eyes of owls on the under-surface of the wings, and others are adorned with marks of various colours, like many-hued hieroglyphics.

Many large beetles, too, are boomerang round and round, apparently searching for a place to alight on and imbibe the sweet liquor. Some of these, on capture, prove to



MONKEYS, HUMMING-BIRDS, AND BUTTERFLIES.



be most richly marked creatures, being of coppery hue, with radiating orange-coloured streaks on their wing-cases.

From this point we commence our return journey, Lauriano and Manoel having decided that it will not be practicable to collect roots at a further distance from the canoes.

Before leaving we add another barrigudo monkey to our load of game, shooting it as it was swinging along some twisted lianas, over which a flock of a smaller species was passing, and this time have the luck, so much craved by the Amazonian hunter, to find a young one, unhurt, clinging to the back of the poor animal as it falls. My undemonstrative young savage, at the sight of this, is almost beside himself for joy. The men detach carefully and fondly the screaming baby-ape from its hold on the fur of its mother, and nurse it in turns with as much pleasure as they would one of their own children. For all these half-civilised people are fond of pets, and are successful, to a degree scarcely credible, in taming the wild animals of their country.

Our march home is much more rapid and noisy than our walk in the morning, and we reach the encampment long before sundown.

An acquaintance with the beautiful and strange forms of animal life harboured in these boundless shades can only be made gradually, and the best way of attaining this is to go alone, or with one quiet companion, daily into those parts of the forest where animals are most

likely to be seen, and move about leisurely and silently. It is in this way that we occupy the succeeding four days. There is no fear of being lost with such a follower as Sebastian, who is endowed with the topographical instinct of a dog.

A favourite spot is a dry hollow, distant about a mile from the encampment, where the colossal trunks of a number of Brazil-nut trees tower up from the ground, and a line of gigantic arum plants marks the course of a little rill, now parched up by the long continuance of dry weather.

Whilst seated here, during the panting hours of mid-day, we never fail of seeing several of those sprite-like denizens of the shadiest parts of the forest, the phaethorninsæ humming-birds, creatures very different in habits from the winged gems which swarm about blossoming trees in open sunny places.

The phaethorninsæ have plain olive-green or brownish colours, and long wedge-shaped tails, tipped with white. They do not frequent flowers, but search for food (minute insects) amongst the foliage of the underwood, moving with whirring flight and arrowy swiftness from one bush to another, and passing above and beneath the leaves with great rapidity.

They vary much in size, for we find here one kind not much larger than a humble bee, perched sometimes on the top of a stem of grass; and another, almost as large as a swallow, which flies up to us boldly, and remains poised in the air for a short time, within a few inches of

our face. The nests of these shade-loving humming-birds are built at the tips of the undivided fronds of dwarf



HUMMING-BIRDS AND NEST.

palm-trees. We are sure to meet with one or more of them by searching carefully, and often surprise the diminutive mother, with twinkling black eyes, sitting on her eggs.

One day, whilst slowly wandering in the same pleasant spot in search of insects, we have the good fortune to meet with two of the strangest and most characteristic forms of the larger animals of tropical America. One is the sloth, and the other the ant-bear, the tamanduá bandeira, or banner ant-eater, of the European colonists.

Of the sloth we do not see much.

The keen eyes of Sebastian detect it clinging to a branch of the cecropia, or candelabrum-tree, a species which has large palmate leaves, the favourite fruit of the sloth. The colour of the bark and underside of the leaves of this tree is precisely the same as that of the shaggy hide of the animal; and this similarity of hue gives it a means of protection against the searching eyes of its deadly enemy, the eagle.

Whilst we are looking, the creature begins to move: it secures itself, by the claws of its hind feet, to the branch, rears its body, and sways about until it has found a secure foothold for the next step; this done, it draws its body up and then repeats the process. Sebastian, whom I have been all along restraining from climbing the tree to take the animal alive, now begins to mount; but, at the first shake of the stem, it quickens its steps, and is soon lost to view in the dense crown of a neighbouring tree.

The ant-eater introduced himself in a different manner from this.

We are lying at full length on the ground, amused with the antics of squirrels, black and grey, in the trees

overhead, when we hear a rushing noise amongst the underwood a short distance from us. We start up, with the involuntary exclamation "A jaguar at last!" and grasp our gun.

But we are mistaken. Instead of the leopard-like jaguar, a couple of black objects emerge from the thicket, chasing and wrestling with each other, and careering round and round. They move past, taking no notice of our presence; but during a pause of a few moments which ensues on one of them being thrown on his back, we discern plainly the long narrow snout and broad grey flank stripe which distinguish the ant-eater.

The two bear-like creatures chase each other in the same helter-skelter manner quite round the place where we are standing, and astonish us by the nimbleness of their movements, seeing that these animals are forced to tread on the sides of their feet, owing to the very long curved claws with which they are armed.

The ant-bear, seen in a state of semi-domestication in the houses of natives, appears a most listless and inactive animal, but he is clearly no sluggard in the woods. His mode of life, the nature of his food and manner of taking it, are all pretty well known. He devours great quantities of termites, or white ants, the friable earthy hillocks or nests of which abound in every part of the forest; pulling the structures to pieces with his claws, and licking up the masses of fat, juicy insects out of their chambers with his flexible tongue.

On the last day of our stay we make a toilsome excur-

sion with the two masters and five Indians in the low tract of forest which covers the level ground on the opposite side of the pool.

The results of our chase in these entangled thickets are



THE ANT-BEAR.

very small, consisting only of a brace of curassow birds (*mutums* of the Indians), large fowls resembling turkeys, but having a rich plumage of a glossy-black hue and bright red beaks. Unlike all other gallinaceous birds,

they reside habitually in the crowns of lofty trees, where the males with their numerous partners move about, hidden in the foliage, the flocks betraying their presence only by the emission, now and then, of a long-drawn whistling note, resembling a sigh. Five distinct species of these magnificent birds inhabit the forests of the Amazons, where they are much sought after by the natives, both as food and as pet animals.

Our toilsome ramble is brought to a close just as we have reached a tract of more open and higher ground, by an unexpected change in the weather.

The signs of the change begin about noon. At this hour, the heat, which on the preceding days had been moderated by a pleasant breeze, is felt to be unusually great, and not a breath of air stirs in the tree-tops. An irresistible languor and desire for rest seize on all of us. The perspiration trickles down the faces and backs of the Indians, and our own clothes cling to the skin. After dinner no one seems inclined for further exertion, except the persevering Manoel, who insists on *prospecting* a little over this new ground for sarsaparilla, and sets off with two of the men, leaving us to rest for a time on the trunk of a fallen tree.

After the lapse of an hour we perceive the air gradually darkening around us; the closeness becomes oppressive, the smaller birds begin to fit about in an agitated manner, and we feel an uneasy sensation, as though some vague calamity were impending. In a few minutes a dark pall of clouds is seen, through the interstices of the

foliage, to be spreading itself overhead, and this quickly obscures the sun, and brings with it a light watery wind from the side whence the clouds have arisen.

Lauriano then starts to his feet. "Ahi vem trovoadá!" (A squall is coming!) He shouts with all his might after Manoel and the men, but in attempting to repeat the call his voice is drowned in a hurricane blast, which comes with a deafening roar, swaying the tree-tops, and making the lighter stems bend like bows.

A shower of broken branches and heavy masses of air-plants, torn from their anchorages above, falls about us, driving us to the shelter of a large tree. The whole sky has become suddenly black, and, in the dim light, the tearing wind, bending boughs and leaves all one way, and driving a stream of fragments before it, produces the effect of a grey torrent sweeping through the wilderness.

A flash of lightning, a rousing thunderclap, and a deluge of rain increase the uproar; the pelting of the heavy drops on the thick canopy of foliage resounds like the beating of waves on the sea-shore, and the thunder, once commenced, continues without intermission in reverberating peals. The tree no longer offers us shelter, and we are drenched to the skin.

A half-hour elapses before Manoel rejoins us, followed by the men, who have had a narrow escape from being crushed beneath a huge tree that has been uprooted by the storm.

After the violence of the wind has abated a little, we set off to return to the canoe.

The rain continues to fall in torrents ; but this, as generally happens in this sweltering climate, instead of depressing us, has an exhilarating effect, and we are inclined to joke over our discomforts, as we trudge along ; and the Indians, who are usually so taciturn, now become quite chatty and companionable. We have no difficulty in finding our way, but have to wade through pools of water that fill all the hollow places, and run great risk of treading on poisonous snakes, which often lie in flooded parts of the forest. No mishap, however, occurs ; and we arrive at the encampment in due time, with dripping clothes and ravenous appetites.

As a last night spent in the wilderness, for the purpose of observing the phenomena of animal life, it is a very appropriate one.

The heavy rains, following a long period of dry weather, have given a sudden stimulus to all living creatures. Even before the short twilight commences, signs of unusual activity are manifested.

The lower trees close to our encampment are animated with large flocks of a pretty little monkey, with flesh-coloured face and black mouth (*Callithrix sciureus*), that have come down to the shores of the lake, probably to feed on insects, which instinctive habit has taught them will be out in numbers after the rainfall. They scamper gaily from bough to bough, shaking the heavy drops of moisture in showers into the water.

A little distance off, a small party of howling monkeys has taken its station near the summit of a tall tree,

and is now venting its unearthly cavernous roar, which forms so great an item in the evening chorus of animals in these solitudes.

The water-fowl at the end of the pool are unusually active. Straggling trains of piosóca, a species of water-hen, which strides from one water-lily leaf to another are passing to and fro with disagreeable cack-



WATER-HEN AND WATER-LILIES.

ling cry; and disturbing flocks of teal,—elegant birds, with chocolate and drab coloured plumage,—which utter pleasing whistling notes as they fly from one spot to another.

A large speckled grey kingfisher, as big as a crow, and which abounds on tow bushes on the margin of the water,

makes a loud noise; some scores of them ejaculating their notes in succession or in chorus.

Numbers of large grey storks, and herons of various species, increase the animation by frequently changing their places, loudly flapping their wings, and chasing each other.

On the higher trees the harsh cawing of parrots is



THE GREY KINGFISHER.

heard, and lower down the unmelodious songs of swarms of yellow finches and flycatchers.

Loud and piercing notes come from the depths of the forest, amongst which can be distinguished the swaggering cachinnation of the laughing eagle and the shrill bray of the horned screamer—cries which wake dull echoes through the wilderness.

When darkness begins to close around, the noises of birds become gradually less numerous; but now the more continuous din of amphibia and insects takes their place.

Swamp-frogs, tree-frogs, land-frogs, and toads—animals which, during the whole of the dry weather, scarcely made their presence known—now seem to start into new life. There seems to be an almost endless diversity of species, many of which can be distinguished by the difference in their notes. Some of them make a resonant drumming noise; others quack like ducks; others, again, have a plaintive, hooting cry.

To these sounds are added the harsh whirring of cicadas in the trees, and the shrill chirping of hosts of locusts concealed in the herbage.

When the concert, begun by little preparatory tunings, attains its full swell, the jarring tintinnabulation is deafening, and we have to speak to one another in shouts, in order to make ourselves heard.

Clouds of winged insects, mostly ants on the swarm, rise in the air, and are pursued by wheeling flocks of goatsuckers and large bats; whilst other hosts are attracted by the fires of the encampment, and alight on our clothing, or drown themselves in the hot coffee which is being served round to us, seated on the mats.

To our minds, it is as the evening hymn of the animal creation: it speaks of the gladness of heart felt in the midst of this genial nature, and gives the impression of general contentment, exuberant life, and easy subsistence.

IN BRITAIN AND EVERYWHERE.
WITH BOOKS AND THEIR RELATIONS.





IN BRITAIN AND EVERYWHERE.

WITH ROOKS AND THEIR RELATIONS.

THE wise men of Greece used to think the *owl*, Minerva's bird, the emblem of wisdom and learning. They had a far higher opinion of the owl, whose effigy adorned their coins, than had the parish clerk, who, with wizened face buried in his stout rector's cast-off wig, gave out—

“Like to an owl in ivy bush
That frightful thing am I.”

But if the Greeks had been better naturalists, and known a little more about the rooks and their relations, they would certainly have honoured them before the moping solitary bird of the night.

The owl keeps himself and all his wisdom, if he has any, to himself. He is like a solitary savage in the

forest, who knows nothing of society, its laws and regulations, but lives only for himself. The Greeks ought to have taken the rook, for if ever there was an aristocratic republic in the world like their own, it is to be found in the tops of those tall trees.

The rooks understood the laws of property, and acknowledged hereditary settlements long before man had discovered feudal tenure or forty-shilling freeholds. The old folk at home maintain undisputed possession of the same forked branch which has been the flooring whence many a family has hopped into the world. The young folk have to seek a settlement for themselves, and must build their new home by their own labour.

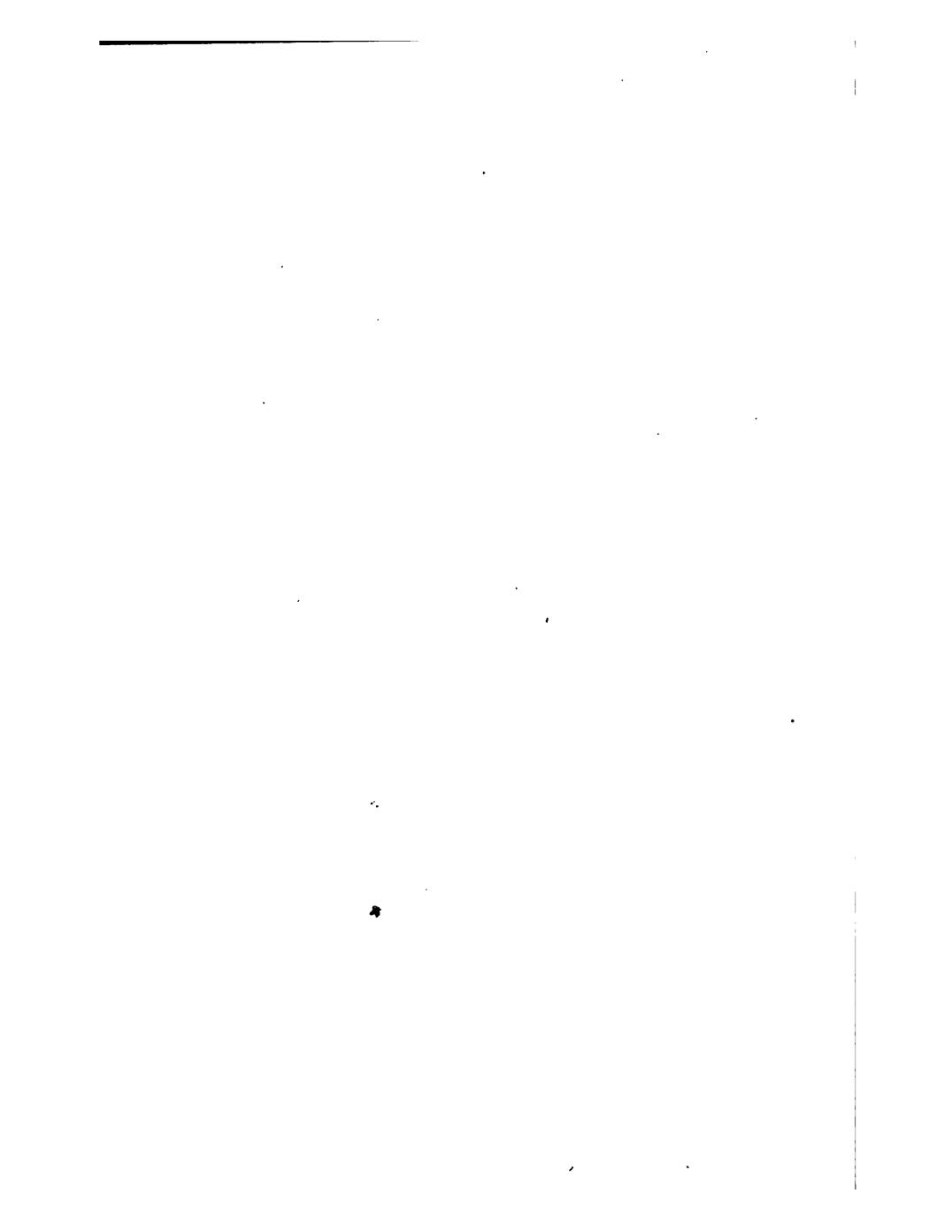
But young rooks, like young men, very often make a bad start in life, and invest their labour on bad security. A gale of wind dissipates their fortune, and the sticks they have toiled to gather are scattered in a moment. They try to start again with borrowed capital. "The old folk have plenty of sticks; we may as well take a few whilst they are away at work." But Father Rook keeps a good account of his building materials.

Listen to that solemn "caw, caw," from the topmost bough when he returns about an hour before sunset. See now how the old parliament rooks gather round him, and listen how they groan forth their caws in chorus as Mother Rook tells how she has been robbed; then there is a pause—the jury are considering their verdict.

On a sudden there is a universal jabber, the assembly darts off to the neighbouring tree, and, in a few seconds,



A ROOKERY.



the nest of the dishonest young pair is scattered to the winds. Depend upon it, Rookdom knows nothing of the law's delays, but their republic is administered with prompt justice between rook and rook.

There is no toleration among them for the doctrine that "he should take who has the power, and he should keep who can." It is even said that an incorrigible offender has been strangled by his fellows; but, as I have not seen this, I will not assert that the republic admits of capital punishment, though I have often seen audacious offenders pertinaciously driven into banishment, and compelled to settle apart in a penal colony.

We said the rooks were true aristocrats, and they have shown their dislike of human revolutions, for they were so dissatisfied with the overthrow of the old *régime* in France, that at the Revolution they nearly all quitted the country, and comparatively but few have returned to it. This is really true, only prosaic people have explained it by the fact that the trees which surrounded the old châteaux were nearly all cut down, and so their inhabitants had to seek for new quarters.

In the same way the Turks tell us that the storks are true Mohammedans, because they nearly all left Greece after the War of Independence, the reason being that the stork, like the rook, knows his friends, and that, while the Mussulman cherishes him on religious grounds, the Greek, with no such scruple, dislikes his litter, and robs his nest, when he claims to share the roof with its proprietor.

The rooks appear to have some strange law as to continued occupancy. As soon as their young are fledged, unlike their cousins the jackdaw, they desert their homes, and take for a time to a vagrant life, like the civilized Red Indian, who cannot forego his three months' hunting in the year, or like the Londoner, who rushes down to Margate or Ramsgate.

In the summer the rook loves his country ramble, and, Arab-like, roosts at night wherever he has happened to find food and sport. But as the days begin to shorten he revisits the ancestral trees, and by the end of September the whole republic has gathered at headquarters, and with deafening cawings, continued till past the sunset hour, we may fancy the rival story-tellers are recounting their summer adventures, each striving to outdo his fellow in tales of prowess and of wonder. And now, in assertion either of freehold or tenant right, each begins to repair his nest. It can surely be for nothing else, for when the spring bids them prepare for domestic cares, not a shred of the old nest is left, but the new home is carefully formed from its very foundation with fresh tough twigs, judiciously selected, and twisted off the growing trees long before the owners of the soil have thought of opening *their* eyes, and beginning *their* morning work.

But the rook knows the proverb, "the early bird catches the worm." Early to bed and early to rise, he is content with four hours' sleep in summer, though he has no objection to a siesta at noon. But he seems

drowsy when he first gets up ; and as he leaves his perch before sunrise for the potato-field or the meadow, he sails sluggishly along, too sleepy to utter a single croak. But he has a long day's work before him ; he has many miles to travel before his household and himself are supplied.

The farmer need not be jealous of him, for though he may swallow a few ears of corn, or munch a new potato, he never yet destroyed a crop, and his vegetable food is merely sauce for the thousands of grubs which he destroys. Worms and caterpillars are his staple, and he walks quietly about the field, always facing the wind, lest his feathers be ruffled, piercing the soil for a worm, or digging up the root of a plant at which a caterpillar is gnawing. He has done no harm to the agriculturist by uprooting his grass, for wherever he has plucked it there was a worm at the root, and his thrusts have checked further mischief.

Where the land is tilled, and consequently looser, so that the grubs are more deeply buried, the rook, from his habit of thrusting his bill into the earth, wears away the feathers of his face, and thus, while in England the young rooks are feathered to the nostrils, the old ones are bare up to the eyes. But in countries where subsoil ploughing is not in vogue, and where the ground is consequently so hard that the insects do not bury themselves deep, the rook has no opportunity of shaving his face by rubbing it in the earth, but continues, as in Asia Minor and Syria, to grow his natural beard and moustache.

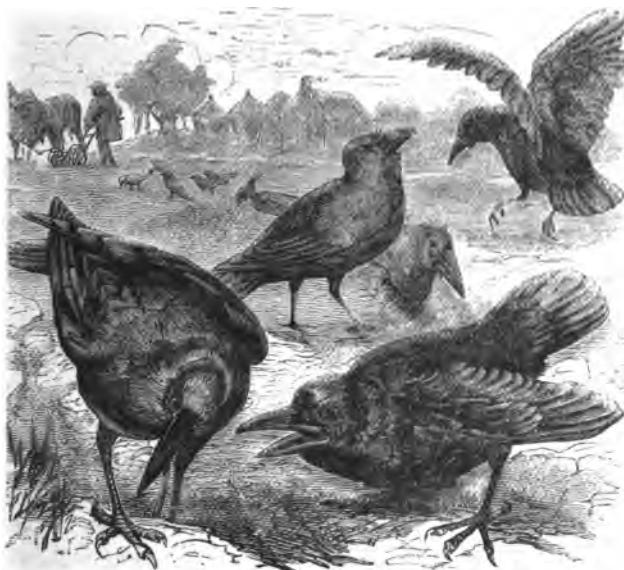
The rook seems to consider that he is a friend of man, and ought to be treated as such.

The finest trees will not induce him to nestle far from human habitations ; and, where trees are scarce and men are many, he will put up with rather indifferent and even unlikely quarters. There are, at the present moment, four or five rookeries in London itself, and, until three years ago, there was a little rookery between St. Paul's and the Thames, in the very heart of the City. But there the rooks' last retreat has yielded to the advance of improvement, for a new street has been cut through his quiet refuge in the garden of Doctors' Commons. There, in the centre of the busy City, I have counted thirteen kinds of birds secure from guns and gamekeepers. Attached, however, to the society of law, the Doctors' Commons rooks have accompanied their unfledged neighbours, and have settled down in the Temple Gardens.

When attracted by human society, the rook will sometimes adopt a more artificial foundation for his nest than his native tree. For years a pair established themselves on the vane of the tower of the Exchange, in Newcastle, and supplied Bewick with one of the favourite subjects of his pencil. A similar attempt was lately made in the City of London, on the vane of St. Olave's Church, and rooks have built between the wings of the dragon of Bow Church. They had no fear of the City churches being demolished then. But, like the herons, the rooks understand a notice to quit in the shape of cutting down trees.

Baron Ravensworth lost his heronry through the cutting down of a single tree amongst the many on which these noble birds had established themselves.

But the rook does not wait for the tree to be felled.



BOOKS AT WORK.

He has noted human manners and customs, has pondered on the laws of cause and effect, and either the instinct or the inherited wisdom of Rookdom has ascertained that, when a piece of bark has been pared from a tree, the axe will shortly do its work ; and consequently,

when an elm has been thus scored, the rooks will at once cease from building on it.

The rook is not without his enemies, and the chief of these is the agricultural economist.

He sees the rook in a cornfield, and shakes his fist at the "thief" who is robbing his granary. But have patience: the rook, like other tax-gatherers, is not popular when he calls for the rates; but if the tax-gatherer has soldiers, and policemen, and judges, and ironclads, to show for his money, so our friend reminds us that if for one month he tries a vegetable diet, he has saved you acres upon acres of corn by his unwearied consumption of grubs and wire-worm for eleven months of the year.

Like most old families, the rooks have various relatives and hangers-on not quite so respectable as themselves.

Foremost among these is the carrion-crow, who imitates his cousin so well that a careless observer might easily mistake him for the gentleman himself; but his coat wants the beautiful purple velvet gloss, and, though as shiny as the other, is of a more sombre hue.

When he opens his mouth, his note betrays him, for he has abandoned the deep croak of the raven, without attaining the cheery caw of the rook. Again he is a skulking, sneaking fellow, a solitary, lonesome ghoul who seeks his unclean diet without a fellow, and gorges himself whenever he has a chance.

The rook never acknowledges the relationship, and the carrion-crow builds a lonely and untidy hovel, unlike the rook, heaping up any rubbish that may come to hand,

generally on a fir-tree in a secluded corner of a plantation. On a foundation of rotten sticks, it plasters a layer of fresh earth, and then—for the young seem less hardy than the rook's—adds a thick lining of wool and hair, which it plucks from the backs of sheep and cattle.

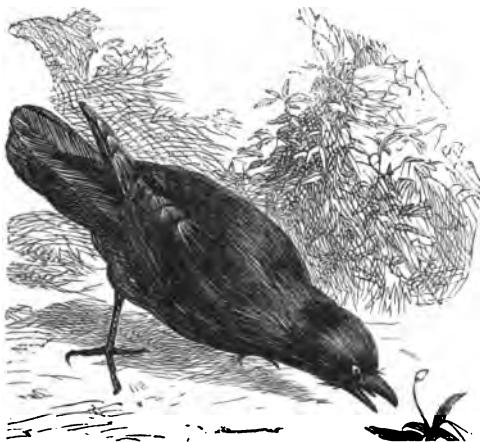
But, though devoted to his young, he is a cruel fellow, this carrion-crow; he will watch the new-born lambs on the hill-side, and, for once, calling in the aid of two or three brother-ruffians, will tear out its entrails, and pick out its eyes, before the mother has time to defend it. But he carries a guilty conscience with him, and seems aware that man is everywhere his enemy.

Look at those rooks marching with a dignified gait at the ploughman's heels, and picking the grubs out of the fresh-turned furrow,—they are conscious of their merits then, and know that the political economist has no jealousy of their presence in *that* field. But where is the corby, as the carrion-crow is called in the North? *He* is skulking on the other side of the hedge, or more likely three or four fields off, more wary than even the rooks in harvest time, for he knows that *he* will never have a friend's welcome.

And yet he is a wag in his way, for when he is once tamed, and become familiar with man, there is no bird in nature, not even the parrot or the magpie, more fearless or fonder of a joke. One in Edinburgh was evidently in the interest of the shoemakers, for his delight was to peck at the heels of every bare-footed urchin he came across;

and the more frightened they were, the more delighted was he.

They have also a wonderful memory: like the bear, they are in the habit of burying the portion of the carcase they cannot eat at the time. A tame crow was once seen cunningly burying a dead mole in a garden: he smoothed the earth so cleverly over the spot, that the sharpest eye could not have detected the grave. He was then shut



THE JACKDAW.

out of the garden for a week, when, on the door being opened, he instantly hopped to the spot, and exhumed the savoury morsel.

Far better known is another poor relation of the rook—the impudent and familiar jackdaw.

He seems to be aware that there is a sort of immunity afforded to the rook, of which he has not the smallest scruple in availing himself. You scarcely ever saw a flock of rooks unaccompanied by a number of their chattering cousins, whose sharp "chak, chak" may be at once distinguished from the more dignified "caw" of their leaders.

Where towers and rocks are scarce, the jackdaw often builds his nest under the protection of the rooks, and I have seen in my garden a jackdaw's nest thrust in the fork immediately under the platform of the rooks, while a few inches below the starlings had secured a snug hole.

In fact, the jackdaw is a pert and loquacious little fellow, ever cheerful, always on the alert, and ready either for business or frolic. He is not so respectable as his big relation, but is at least the most pleasant of the family, and very fond of society.

But he prefers towers to trees, and is particularly addicted to our English cathedrals. He has established himself in St. Paul's Cathedral; he once succeeded in setting fire to York Minster; and he inhabits many buildings in London, Edinburgh, and all our great cities.

He can, however, dispense with human society, and is equally fond of ruined castles or desolate sea-side cliffs. If need be, he can even descend to a rabbit-hole, and, among other unlikely spots, he has established a colony on the giant stones of Stonehenge. He nibbles no twigs for the perennial repair of his nest, which, when he gets inside a tower, is an enormous, cumbrous structure.

I fear he has robbed many a poor washerwoman of her character, for he is particularly attached to caps and lace for the lining of his home. In one nest was found a piece of lace, a worsted stocking, a silk handkerchief, a frill, a child's cap, and various other articles. In fact, he has an ungovernable propensity for carrying off articles which are of no use except to the owner, certainly not to *him*. For his foundation he prefers as much ready-prepared timber as he can find lying about in the haunts of men.

The late professor of botany at Oxford prided himself upon a magnificent collection of grasses. Now, as grasses are, of all plants, the most difficult to distinguish when out of blossom, each was carefully marked by a neatly painted label; but from time to time the labels disappeared. So useless a theft perplexed the worthy professor, and, for a time, the deed was attributed to under-graduate mischief.

A watch was kept; but, when the gardener appeared in the morning, the labels that were safe over night had disappeared, evidently by ghostly hands, for there was not a foot-mark on the beds.

At length, in the interior of Magdalen Tower, it was discovered that a pair of jackdaws, wishing to raise their nest two or three feet above a disused staircase, had established it on a pile of several hundred labels, which they had collected long before the gardener had turned out of his morning watch.

The rook has one more relation, the prince of his clan,

THE RAVEN OF THE ORKNEYS.





very different in his habits, and whom we in England rarely see.

How many in a thousand ever heard a *raven's* croak ? To see him at home now, we must travel to the Orkneys or the Hebrides. The pairs that remain in England might almost be counted on the fingers ; but so long as he was allowed to remain, the rook was not more faithful to his breeding-place, and many a "Ravenscliffe" and old "Ravenstree" remind us of the spot where for ages, year after year, their brood was reared.

In this country at least they are not fond of the society of their fellows, for the young are invariably sent out into the world to seek their fortune far away from the parental home ; and, if it were not for the enmity of gamekeepers, the raven would soon again become a familiar sight in most districts of England.

It must be necessity, and not moroseness, which makes him so unsociable ; for his carrion food is here but scarce ; not so in warmer climates, where he becomes as sociable as the rook. Thus, about the mosque of Omar, in Jerusalem, hundreds of ravens, of our species, nightly congregate. They seem to have learned that the Moslem veneration for sacred places makes them there quite secure.

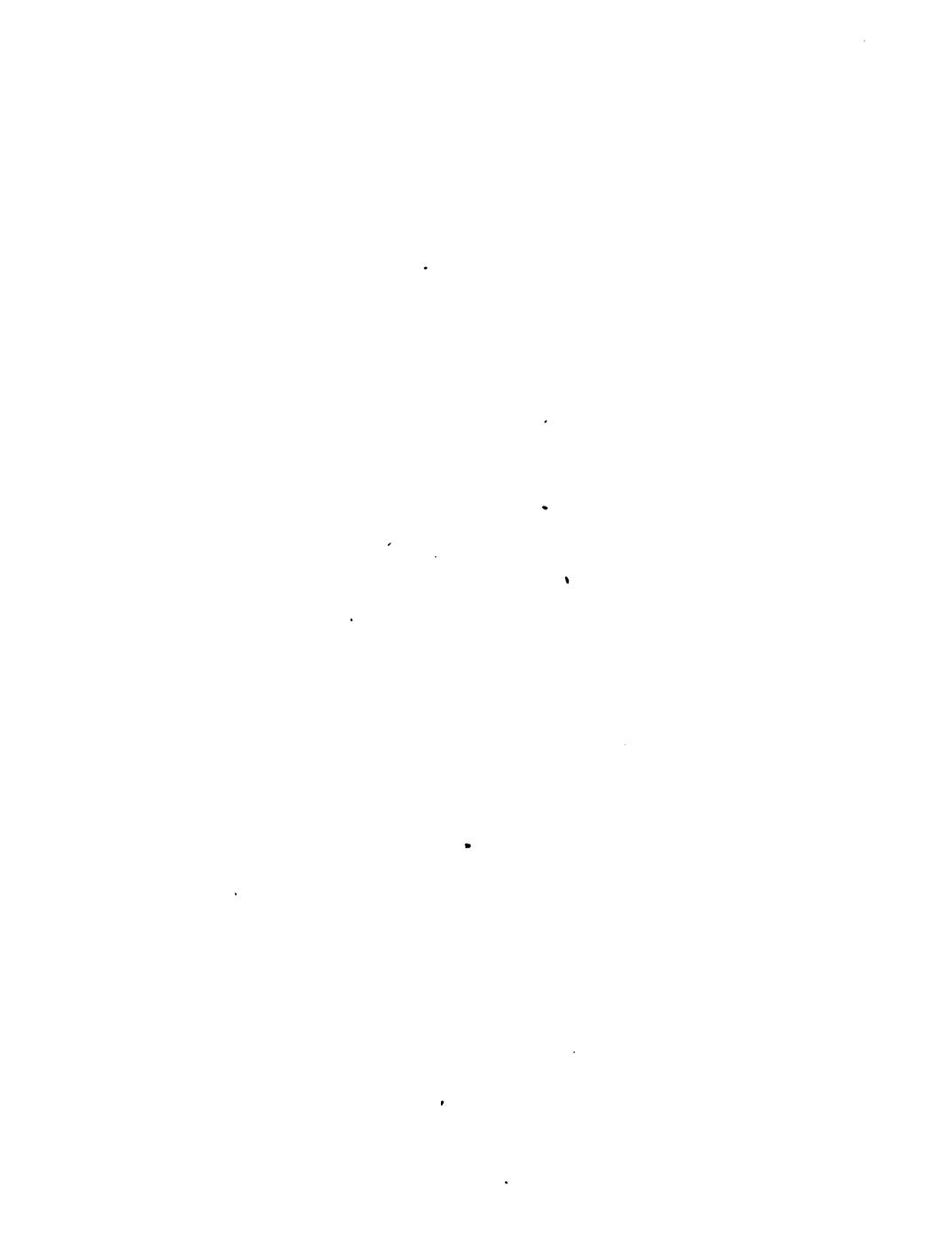
Of all the birds of Jerusalem, the ravens are the most characteristic and conspicuous. They are present everywhere to eye and ear, and the odours that float around remind us of their use. The discordant jabber of their evening sittings round the mosque is deafening. All the

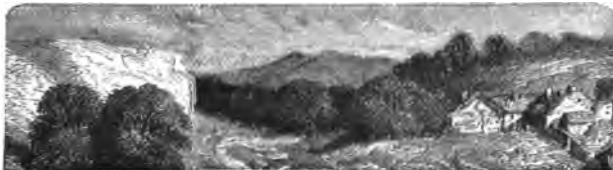
cousins are collected. The caw of the rook and the chatter of the jackdaw unite in attempting to drown the hoarse croak of the old raven, but, clear above the tumult, rings out the more musical call-note of hundreds of the brown-necked raven.

We used to watch this great colony, as, long before the city gates were open, they passed, in the grey dawn, in long lines, over our tents to the northward, the rooks in solid phalanx, leading the way, and the ravens, in loose order, bringing up the rear. Before retiring for the night, popular assemblies of the most uproarious character were held in the trees of Mount Olivet and the Kedron, and not till after sunset did they withdraw in silence, mingled indiscriminately, to their safe roosting-places in the sanctuary.

On a wet day—and there was some wretched weather at Jerusalem—the rooks would determinately set out on their travels; but the ravens stayed at home, sitting about by twos and threes among the olive-trees, generally in silence, but now and then croaking a doleful remark on the weather, or warning from their neighbourhood the draggled jays, whose soft plumage was no better protection, in such a downpour, than a lady's evening muslin. Posted as sentries round the down-trodden city, they seemed like the ghosts of old patriot heroes groaning over its decay.

IN ENGLISH WOODS.
WITH BIRDS AND THEIR HOMES.





IN ENGLISH WOODS. WITH BIRDS AND THEIR HOMES.

I.—THE PAIRING.

A LITTLE bird's nest, half decked with snow, and lying unsheltered in a naked, leafless bush, tells not by a long way the whole story of its origin. It is a legend of the spring, not of the winter.

When the red beech has covered itself with a thin green mantle, when the root-leaves of the flote grass have broken through the soil, and peep longingly upwards as if eager for the greater freedom, when the meadows and hedge-banks are dotted here and there with the curly leaves of the primrose, and the fantastic colt's-foot begins to push forth its reddish blossom-bulbs, around which no leaves are as yet visible,—it has long been spring with the birds, although the swallow—the glad prophet of the year, the harbinger of the best season—

has not yet arrived. They have long felt that their best, dearest friend was near, just as one gifted nature feels as by instinct the approach of another.

And when the heart is full the lips will overflow. Many a little bird has already, from the fulness of its heart, begun to pour out its song of gratitude.

The tomtit and common sparrow commence first; they are about the earliest to pair, and begin their lively, chirping notes even in the beginning of February.

Drearly the yellow-hammer sits upon the house-roof, with drooping tail and feathers blown out; it is almost too early for him to seek his mate, but he already feels that a better time is come, and sings, softly as yet, but so thoroughly heartfelt, its short touching song.

It is not hard to guess the burden of that strain. Many a heart has felt it when, in the first warm rays of the earliest spring, it has looked back upon the struggles of a long dreary winter.

The little fellow, as he sits chirping there, remembers them all; how he used to hop about, and beg from door to door, or perch upon the railing in front of a barn, wishing and longing from his heart that the cat would go away, so that he might hop down, and pick up the few grains that had flown over the thrashing-boards.

Meanwhile the bird-concert grows more powerful every day. A magician has struck with his wand, and the waves of sound spread farther and farther through wood and field, like the swelling waves around a stone cast into the water.

The magician who has wrought this wonder is called Spring, and every song he evokes is a song of love.

But, ere long, the arrival of a prince is announced, and the report spreads in the murmur of soft music through-



IN THE LONG WINTER.

out all the feathered tribes that dwell in wood and meadow. His official herald, the lark comes first—

“ With a soul as strong as a mountain river,
Pouring out praise to the Almighty giver.”

Joyfully he rises on quivering wing, singing as he flies, and ascending to such a height that one grows almost

dizzy at the thought ; yet so powerful is his song, that its glad, gushing notes may be heard distinctly when the pained eye can trace his course no longer.

His sharp eye keeps a jealous watch over the field beneath. As far as his song can reach he will claim for his territory, inverting the old Roman legal maxim, and maintaining, “ *Cujus cœlum, ejus solum.* ” *

And now commences a battle for territory ; all other occupants of the field have to be driven out, and, for some time, a perfect contest of buffeting, biting, and spurring is kept up, accompanied by all the clamour of infuriated rage, until the several migratory tribes have found homes in their new land, and settle down with their mates to the performance of the more important duties of the season.

Then peace reigns over all.

Larks pair in April, and what a merry wooing they carry on among them !

In what sweet strains does the wooer tell his tale of love ? and, when the mate is found, how he labours with his cheerful song to beguile her hours whilst she builds the nest in some well-selected spot on the ground, under the shelter of a tuft of herbage or a clod of earth.

Then, when the first little egg, with its greyish-white ground, tinged with green and mottled with dark brown, is laid in the nest, there is no end of rejoicing. In his proud delight, the male soars aloft, and remains there,

* He owns the sky who owns the soil.

still floating in the rosy evening gleam, when the field below is already reposing under the first thin veil of night.

But it must descend to its humble dwelling again, for what goes out of the soil must return to it. The inspired bird, however, cannot yet reconcile its eyes to earthly



PAIRING.

sleep. Everywhere upon the fallow ground hundreds are still singing, in a more subdued and somewhat dreamy tone, it is true, but of a more wonderful sweetness than when up in the heavens. At length their voices become gradually hushed, like the lights in the village that go out one after the other as midnight approaches.

Like the lark, every other migratory tribe has, if not to conquer, at least to contend for and protect the spot upon which it builds its nest, and very hot warfare is carried on at the beginning of the pairing season, when both migratory and constantly resident tribes meet upon common ground.

Every song, whether it sound from the pinnacle of a slender fir-tree or from the dense reed forest on the bank of a stream, from the summit of a rock meagrely clad with a thin, dry, unfruitful grass, or from the blossom-covered boughs of an apple-tree,—every song was a war-song before it became a hymn of triumph.

But how happy they are in this!

Every burst of braggadocio hurled from the little warbler's throat, which seems to say to the enemy, "Take care, a lord dwells already here," allures, at the same time, the female to come and build her nest; and when the males in their flight together drop down towards night, and strike up their love-song in warm emulation, she comes as it were overnight and in a dream, as in the old Hebrew legend. In the solemn stillness of the evening the fairest and most feminine of the females nestles to the side of the best and manliest of the singers, and the next morning they fly away together to where the grove with the ruined dwellings of the past year, some distant bank of a river, or a quiet solitary spot in the wood, becomes again to two fresh hearts the theatre of their life and love.



THE CHAFFINCH AND NEST.



Here, whilst the male keeps watch and sings without, his partner—quiet and modest like the colour of her simpler plumage—toils within, making a soft cradle for the young.

Every bird now grows bolder and more familiar.

Upon the woodland path or the roadside, the tomtit and the gay chaffinch, commonly called the Pink, from its short nervous call-note, may be seen pulling out with their beaks pieces of stubble and feathers that stick fast in the wheel-tracks, or hopping about upon the cattle-tracks in search of loose hairs and wool. It is a complete curiosity to see the strange accumulation of materials that some birds collect during this occupation.

All the sufferings of the past winter are now forgotten, and the only snow that falls is the white blossom-flower from the apple and elder-bush. And in the midst of this budding and blossoming magnificence, in this kingdom of light, colour, and fragrance, the bird, with its ever-fresh song, reigns king and herald at the same time.

In the most secluded spots there is working and singing.

In the field, the lark is busy widening and smoothing with its breast a small hollow, ready to be lined with a humble texture of coarse stubble upon which to deposit the four eggs, all with their pointed ends downwards.

Upon the high bank of a river the Bank-Martin is digging with beak and feet, boring in the soft substance, sometimes to a depth of two feet, with an amount of labour rarely exceeded among the feathered tribes,

whilst, when on the wing in search of food, it skims noiselessly over the clear mirror of a river, drinking, sipping, and sometimes washing as it flies.

In the branches, too, that overhang our windows, bits of straw, feathers, and moss have been carried unob-



THE WOODPECKER AND NEST.

served and in secrecy, without our having the least conception of what is going on, till winter, with its malicious hand, lays the secret bare.

Another curious architect, the shy woodpecker, is hard at work upon the branches of the forest trees, scooping

out with its beak a receptacle for its eggs, and carrying away to a distance the chips of wood, so as to prevent the discovery of its retreat ; and the nut-hatch, called in some countries the plasterer, from its peculiar habit of plastering up its nest, is toiling away in the hollow of a tree, or under the eaves of an old secluded gable, closing up the door of its last year's dwelling, although there is still room enough left for its enemies.

And with what exquisite delicacy all this workmanship is executed !

How skilfully the beds of feathers, stubble, moss, and hair are woven ! What a neat round smooth little hollow is made in the earth or the tree-branches ! Their house and their plumage, their song and their life, everything breathes of grace and beauty in the bird-world.

Then when the little warbler has wooed and won his mate, how tenderly he nestles around and caresses her, singing as sweetly as his little throat will let him. How he flies towards her as she comes laden with the material for building, and, following her playfully to the nest, hops about upon the fresh green twig above, whilst a loud warbling of delight gushes from his full heart.

Woe to the hand that can wantonly stretch forward to despoil a bird's nest !

The earth is decked with the green mantle of May. All the birds are singing, and the rosy beams of the evening sun dance to their song in the tree-tops. Darkness is gathering slowly around, and the voices grow

fewer and fainter; one by one they become hushed, till at length, in the elder bushes and upon garden railings, the voice of the nightingale alone is heard.

Warm, dark, and moist the night draws closer around; the elder-blossom breathes out a warmer and



THE NIGHTINGALE.

stronger perfume, and the song of the solitary bird grows louder and richer. There is such a mysterious cadence in that song that one almost fancies he is listening to the outgushing of a heart bursting with rapture and melancholy.

In the village yonder all the doors have long been closed. Perhaps one window, behind which pale sickness

is hovering over a humble couch, still casts a flickering gleam through the darkness. Now and then a dog gives a short gruff bark. The village street is deserted ; not a sound is heard save perhaps the rustling of a few dry straws swept along by the wind. Again the nightingale is heard.

He who has never listened to it can have no conception of the beauty of that song, which vibrates so powerfully around a heart almost stifled by the darkness and perfume of the night, and with such tremor and sweetness, like that of nature itself, in which life and death lie so close to each other.

But soon the cock begins to crow, the woodlark takes its flight high aloft to greet the new morn, which comes again with its bright sun to beam upon all nature, and to gladden the hearts and voices of the birds till the next evening.



IN ENGLISH WOODS. WITH BIRDS AND THEIR HOMES.

II.—REARING THE YOUNG.

THE reader will, doubtless, some time in his life, have seen a little bird that had fallen from its nest, and will have noticed the difference between such a little one and the newly hatched chicken or duck running about in the poultry-yard.

The first of these young birds, as the reader probably knows, has to be fed and reared in the nest for some length of time before it is able to fly away in pursuit of its own food, whilst the young chicken, often with a portion of its shell still sticking to its back, goes at once into the world and looks about busily in search of its daily food.

The reader will further have observed that the young sparrow or chaffinch, or whatever the bird may have

been that had fallen from its nest, was still almost naked when he took it into his hand ; whilst the little duck or chicken is provided with a thick, warm, yellow, or greenish down, which, combined with the shelter it obtains from the parent's wing, protects it thoroughly from rain and cold.

The class of birds to which the first of these belongs, viz., those that spend the earliest portion of their lives in the nest, are called *Insessores*, or nest-squatters, whilst all that are self-feeding, such as the chicken, duck, and a great many others, are called *Autophagi*, or self-feeders.

Birds have no milk to rear their young upon ; but the want of this is supplied chiefly by insects, which they devour to an enormous extent.

Neither insessores nor autophagi can well dispense with them as first articles of food, for the young chickens and other tenants of the poultry-yard always thrive better when they can find spiders and worms (although neither are, properly speaking, insects) than where they are fed entirely upon vegetable matter.

Amongst those insessores which never feed on insects, such as pigeons, the old bird generally prepares, from the contents of its crop, consisting of grain and seed, a sort of semi-fluid substance resembling milk, which is easily digested. This becomes stronger and more solid as the young grow up, till at length it cannot be distinguished from certain seeds which constitute the chief nourishment of our wild pigeons.

The insects mostly relished by birds are the gregarious

caterpillar, the leaf-rolling caterpillar, and the soft smooth grub of the saw-fly.

The insessores are principally tenants of the woods and hedges, whilst the autophagi spend their lives in the field, the meadow, or upon the banks of a river.

Every creature that sings and chirps under the green roof of the forest, has—in the soft moss among the roots of a tree, in the hollow stem, or upon its branches, up to its very summit—its nest carefully concealed, and these nests are built for the most part in spots selected with the greatest regard for the convenience and seclusion of the young. In every nook in the wood one of these little robbers' dens is to be found, with at least four insatiable throats to which insects, caught by the parents, are carried, and there disappear for ever.

One little beak cannot do much in the war of destruction, but when their number is multiplied to an almost endless extent, and the battle is carried on incessantly through a long period of time, the slaughter among the insects becomes considerable. It would, indeed, be dangerous, if, by enfeebling the party friendly to man, the antagonistic party were allowed to preponderate.

But the feathered warriors of the air are only adapted to sharp-shooting practice, and a battle in closed ranks does not suit their nature.

Whenever, therefore, from a deficiency of exterminating beaks, or from any other unseen cause, there arises a superabundance of *living matter*, as Buffon calls it, whenever the increase of the May-chafer, the eared

caterpillar, or the evolutionary caterpillar outstrips the destroying capacity of the bird, and the foliage around becomes thoroughly eaten up by them, the birds quit the barren spot, and leave to other powers a struggle which



THE STARLING AND YOUNG.

they can no longer maintain. The voracity of the hairy caterpillar and larger chafers is so considerable, that, where they exist in large masses, they devour the surrounding foliage, and render the spot no longer capable of concealing the bird's nest.

But let us return to our birds and their nests.

There exists among these creatures a peculiar domestic economy, which is characterized by the strictest regard for cleanliness.

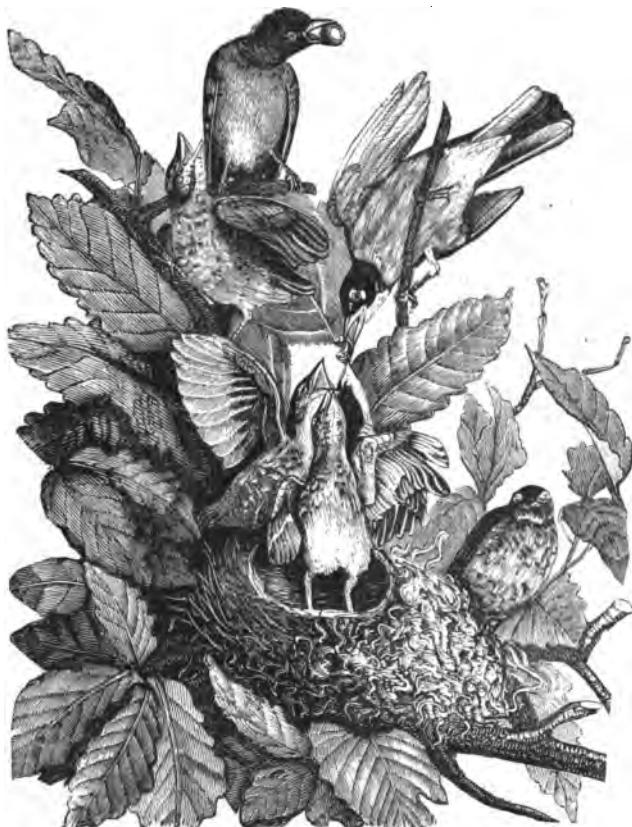
However deep the tit or the woodpecker may have made its nest—and these birds generally build in deep excavations made in the branches of trees, or in otherwise concealed hollows—the young and their beds are always kept most delicately clean, for every speck of dirt is carefully carried away in the beak of the parent bird.

Amongst birds that do not build in hollows, the carrying away of the refuse is no longer necessary, as the young themselves guard against its accumulation. But, even among those birds that build upon the ground, there will never be observed any great accumulation of dirt, as the most part of it is taken away to a distance by the hygienic prudence of the mother, whose instinct tells her that no young can grow up healthy and cheerful in a contaminated atmosphere. Would that every mother possessed the same instinct!

As soon as the feathers have grown a little, as soon as the wings are slightly developed, and the tail has attained a few lines in length, one of the little nest-tenants will elevate itself above its neighbours and brothers, and, gaping slowly, stretch its little bits of wings, as if it already began to feel weary of its confinement.

At length the brood is able to fly, and some fine morning the strongest of them raises itself to the edge of

the nest, stretches its wings once more, makes a spring,



TEACHING THE USE OF THE WINGS.

and flutters over to the next twig. Oh, what a dif-

ferent appearance the world presents from this point of sight!

The neighbouring twig had hitherto seemed to form such a large portion of it. The mother returns with her beak full of food, and is not a little surprised to find one of its claimants, for the first time, outside of the dwelling. But those within have, in the meantime, taken it all from her, and the young "keek in the world" has got nothing.

This treatment appears to the outsider rather questionable, so he hops back to the edge of the nest, and attempts to squeeze himself again into the society of his brothers. But they, in the meantime, have found it not so bad to be able to stretch their little well-fed bodies a little further than usual. The bold *adventurer* discovers that he is not welcome, but, being naturally of a happy temperament, he puts a good face on the matter, and awaits, as near the edge of the nest as possible, the return of the parent's refreshing beak. This expectation is soon gratified, and, having received his portion now, he swallows it with evident satisfaction.

Evil examples, however, corrupt good manners, and ere long another little one follows, hopping cautiously over the nest's edge. The old ones begin to perceive the progress of their young, and the adventurers outside are also cared for. These, too, soon learn the advantage of their new position, and as soon as they perceive the parent in the distance, fly to meet her, begging in the most graceful and coaxing manner for the desired dainty.

And now the tables are turned. The youngest, who

have not yet ventured abroad, see that they too must be up and active, or suffer from their disadvantageous position.

In this manner the whole brood disperse into the nearest bush or tree-top, departing at every move farther from their birthplace. If the parents do not proceed to build a second time, they depart with this family. In the contrary case, the family ties are soon broken, and whilst the next nest is being built, the fledged brood become just as great strangers and intruders as any other bird.

With the autophagi it is somewhat different.

The young run in pursuit of food the moment they are hatched, and the mother's protecting wing is only needed to guard them from cold or wet, and to defend them from the enemy. Thus, on the approach of a kite or any four-footed foe, they all nestle together under the thick grass or weed, which resembles their plumage in colour, and, keeping close to the ground, remain there motionless and noiseless, whilst the quick, bright eyes of the mother keep watch till the danger is over, when she gives the signal, and they all disperse about her once more, not one of them being missed.

The importance of colour as a means of defence may be seen in the plover tribes.

One of these, the *Aegialites minor*, has its breeding-hunt chiefly on the sand of the sea-shore, where not a bit of grass is to be seen, or protection of any kind. Here the young birds, scarcely three fingers high, and distinguished by the white underbody, may be seen running about. In case of danger, however, they crouch down

close to the sand, and, hiding the white, form a little brown mass, almost resembling a flint stone or a crab, in which noboby would suspect there was a living bird. If, however, the little helpless creature should be detected, the parent, more especially the female, comes slowly to the spot, and feigning lameness, tries to draw off the enemy from the young one to herself.

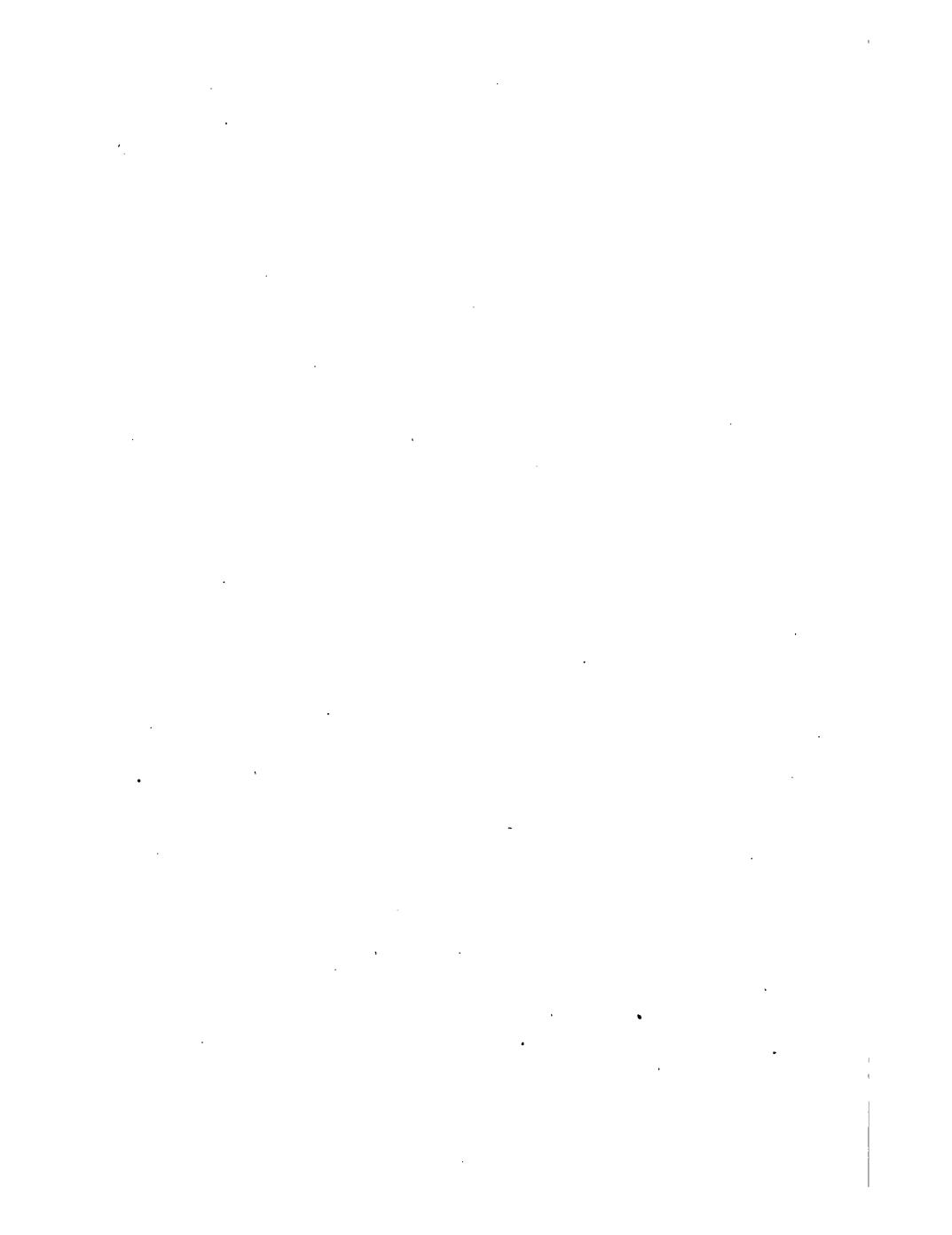
Very often the mallard, one of the duck tribes, builds her nest a good way from the water, and must bring her brood to it on foot. The young waddlers don't seem to dislike the walk, for they amuse themselves by snapping at every insect that passes within their reach, to the great annoyance of the parent.

Some autophagi build in trees, such as the goosander. The greenfooted petronella prefers an old thrush's nest. This bird makes short work of her newly hatched young. As soon as they are out of their shells, she takes them one after the other by the neck in her beak, and flying down with them, places them neatly and carefully upon the earth, till the nest is quite cleared.

Among the autophagi, if the parents do not proceed to rear a second family, when the first brood are able to fly, they, like the insessores, remain together, and their number is frequently increased by others, as birds of this category show a greater inclination to social life than the insessores.

At length, the autumn grows colder, and as their means of nourishment disappear, they go off in flocks, and depart beyond the sea.

IN THE BUSH OF SOUTH AFRICA.
WITH LOCUSTS AND WILD BEES.





IN THE BUSH OF SOUTH AFRICA.

WILD LOCUSTS AND WILD BEES.

THERE are few sights at which the traveller in South Africa is more surprised than a flight of locusts. In England we are fortunately free from such a visitation; for were we liable to it, we might occasionally find a famine suddenly brought on where a day before all seemed plenty. In Southern Africa the locust is much dreaded. It is a migratory insect, and is most erratic in its course, sometimes visiting a certain district several years in succession, and at other times leaving this same locality for years without a visit.

The migratory locust, termed *Locusta migratoria*, is an inhabitant of nearly every part of Africa. It is known in Egypt, and even in the southern parts of Europe, but not in such countless thousands as it is in Africa, though its habits seem the same in all countries.

Those which we have seen in Africa were in two conditions: the first condition was that of a wingless insect of a dark green colour, with black rings round its body; in shape it was like a grasshopper, though much larger than the common English grasshopper.

When in this state the insect is called by the Dutch a *voet-ganger*, "or foot-goer," and, when assembled in numbers, it presents a most singular appearance. In



THE WINGED LOCUST.

some districts these *voet-gangers* may be found all the year round; they crowd together, standing on each other in heaps four or five deep, or gradually advancing over each other's backs.

They are very fond of climbing up small bushes or trees, and on these they will cluster together in masses, holding on to one another with singular tenacity.

When a person approaches and touches them with a stick, or knocks the branch on which they are clinging, they will separate and spread about in various directions ; but if left alone for an hour, they will all be found again crowded just in the same manner as they were previous to being disturbed.

The voet-gangers are very destructive to vegetation. If a party of these insects march towards a field of Indian corn, they are almost certain to destroy it. Hundreds of thousands may be smashed, burnt, or drowned, but still there will remain hundreds of thousands to supply the place of those destroyed, and on they march over the dead bodies of their companions, and, with an insatiable appetite, feast on the vegetation before them.

In such countless numbers are these voet-gangers, that in many cases rivers are crossed in consequence of the dead bodies of those in advance floating on the water, and thus forming a bridge for the others to pass over.

The locust in this first condition is about an inch to an inch and a half in length ; but when they pass from this larval state to their matured and winged condition, they are four times as big. A full-grown locust is from three to nearly five inches in length, and looks like a giant grasshopper. In fact, our common English grasshoppers belong to the true locust. The body is gaily tinted, and the insect is very pretty. Its powerful jaws or nippers are well fitted for a vegetable-feeder ; these jaws will cut through stout leaves like razors, and I have found a locust able to draw blood from my fingers by his bite.

Considering the rapidity with which the locust increases in numbers, it is lucky that it has many enemies who have a personal interest in its destruction, this interest being that they feed on the locust. There are many birds which follow a flight of locusts just as hyænas



BUSHMEN'S DWELLINGS.

will hang about a herd of antelope. Some of these birds are termed the locust bird, because they seem to live on nothing else but locusts, and are always seen flying about after them. Cattle eat locusts freely, so also will antelopes. The bushman, too, considers locusts a delicacy;

and, from personal experience, I can affirm that grilled locusts and wild honey form a by no means bad meal.

Habit, and what we term "fancy," has so much to do with eating, that we rarely obtain an unprejudiced opinion from people as to what they consider good eating. They are often unwilling to own as good what their *fancy* is not taken with. It has often occurred to us that very few persons would be disposed to eat an oyster, unless they either saw others do so, or had very good evidence that an oyster was delicious. We have ourselves seen a Caffre—who would eat meat almost raw, and just killed—become almost ill when he beheld us open and eat a rock oyster,—a proceeding that he would not venture upon on any account.

Well, locusts are good eating, and the way we cooked them was to string them on a wire, and toast them over a fire, then drop some honey on them and eat them like shrimps.

A large flight of locusts is certainly a wonderful sight. The largest we ever saw was about fifteen miles inland from Natal. We were riding at the time, and a moderate breeze was blowing.

As we rode onwards we saw a cloud in front of us, looking like a snow-storm; it was so dense that it quite obscured our view of distant objects, and at first we thought it was a very heavy hail-storm or thunder-shower; but, as we rode towards it, we saw some of the advanced guard coming down on the ground, and we then found we were approaching a flight of locusts.

This flight, as far as we could judge, was four or five miles in breadth, and was about one hundred and fifty yards in height; the locusts were so close to each other that with their irregular flight they frequently knocked against each other and fell to the ground. Hundreds and thousands were on the ground, and rose in a wild guideless course as we rode over them; but as they were flying in the opposite direction to that in which we were riding they struck against our horse's head, and so annoyed him that he would not face them, and actually turned his back on these pygmies. As for ourselves, we were struck over the face and ears by the creatures, and had to protect our eyes with our hands to prevent being blinded by successive blows in the eye with these reckless insects.

As we stood with our back to the storm of insects, we could compare it to nothing but a tremendous snow-storm, where each flake of snow is represented by a locust; they must have been in millions, as the flight was quite half a mile deep. The ground a little in advance, and on which the flight had settled, was almost bare, the grass was nearly all eaten, and the trees were denuded of leaves.

When a flight of locusts settles anywhere, those who are behind soon clear off all the vegetation, and, finding it useless to follow where others have eaten, they fly off, usually going in the same direction as that in which the wind is blowing. They soon alight and commence feeding again, whilst those left behind soon clear the ground and adopt the same plan.

A FLIGHT OF LOCUSTS.



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A FLIGHT OF LOCUSTS.





If the weather is very calm and the vegetation plentiful, the locusts will stop several days in the same locality ; but if much wind is blowing, they are soon off to distant feeding-grounds.

A severe storm of hail or rain is fatal to the locusts, and destroys them in millions. Heaps of dead locusts are often seen after a storm which are of such size as to render it impossible to remain in their neighbourhood in consequence of the offensive smell.

Locusts and wild honey were the food of the ancient people in the East, and in our memory the two stand together ; we sought for and obtained wild honey in the same country as that in which we became acquainted with the locusts ; we have eaten the locust with wild honey, and thus we naturally feel disposed to say a few words about wild honey when we have been talking about locusts.

Let us quit this dull foggy land of ours, and fly off to the far south of Africa ; let us cast off our usually civilised garb, clothe ourselves in a pair of rough leather shoes, a dark flannel shirt, cast off our coat, arm ourselves with a trusty double-barrelled rifle, call our trusty Caffre servant to follow us, and off for a day in the bush.

We want meat, our dogs are hungry ; and ration beef, followed by ration beef, and again by beef, tires us. Now in yonder long line of forest there are buck ; beautiful graceful antelope are these buck, some species not larger than a hare, and very good eating, others as tall as a donkey, and dangerous when wounded. Even

more noble game may be encountered there, for leopards prowl about in this forest, buffalo lurk in the secluded glens, and even the monarch of the forest, the lordly elephant, treads on his silent march, at certain periods of the year, over the very ground we are bound for.

But what has our Caffre with him ? He has a wallet on his back, and in that he has a number of wooden pegs and a hammer.

What can these be for ?

We shall see.

Now we enter the forest, not by a beaten track made by vehicles, or even by man, but we follow a game path—a track made by buffalo or antelope, when they leave the dark mazes of the forest to graze for a while on the open plains.

Up this path we walk with care, slowly and stealthily, for the game we are in pursuit of seeks to protect itself by means of watchfulness, and all bush animals have very delicate organs of hearing.

An antelope is seen ; it has heard something that alarms it, but is as yet uncertain of the direction from which danger comes. Its hesitation is fatal ; a bullet leaves the rifle, and the buck falls dead. The Caffre carefully cleans the animal, and then, with a knowing look, points to a distant tree, and says, “ *Inyosi kona* ” (“ Honey is there ”).

Now how does the man know honey is there ? Well, a Caffre’s eyes are everywhere, and as we walked through the bush, the man saw a bee ; this bee, on being alarmed,

flew off in the direction of the tree. Soon after another bee was seen, and this also flew off in the same direction ; consequently the Caffre sees the direction taken by each bee, and finds these meet at the tree that he sees in the distance. He then concludes that in that tree is the honey.

Carrying the buck with us, we approach the suspected tree, and soon perceive that the Caffre's suspicions were correct, for there, high up, we notice a large hollow, in and out of which the bees are rapidly flying. The Caffre, having examined the tree, takes his wallet off his back, and selects a peg, which he drives into the stem of the tree—for the wood is soft and juicy ; this peg is about four feet from the ground. Another peg is then driven in as high as the man can reach, and he then stands on the first peg, and holds on to the second, whilst he drives in a third, about four feet above the second. He thus ascends the tree, on which there is no branch for thirty feet, and gradually approaches the bees' nest.

When within a few feet of the opening, the Caffre lights his pipe, and commences smoking most furiously, sending above and around him a thick cloud, amidst which he is scarcely visible.

The bees, now alarmed by the approach of an enemy, fly round the Caffre ; but the cloud of smoke is too much for them,—they dare not enter it to sting their assailant but buzz round him, and make a great noise.

Slowly and steadily the Caffre ascends, testing the strength of each peg after he has driven it in, and

at length reaching the opening in the tree. The smoke is now puffed out from his pipe more furiously than ever, whilst the disengaged hand is thrust slowly but steadily into the hollow in the tree. A large piece of honeycomb is grasped and carefully placed in the wallet, and this operation is repeated until all the honey is extracted; when the man slowly descends with his spoil, and a feast of wild honey is enjoyed in this wild and secluded spot.

And what a beautiful spot it is! The trees are fine, solid-looking specimens, with giant branches spreading far on either side; from these branches hang festoons of wild vine, some of which have formidable spikes, an inch or two long, extending their whole length. Other vine is like ivy, and has depending from it broad, brilliant green leaves. Then there is the wild jasmine and musk plant, the flowering acacia, and the strange-looking giant euphorbia, all of them noticeable trees, and here growing in wild profusion. Untrodden is this forest, for as yet but few men have had time or reason to enter it; none but the naturalist or the hunter visits the dangerous bush, in which lurks the stealthy leopard, the formidable python, or the sulky exiled buffalo.

But let us seek wild honey under other conditions than in the dense bush.

Now we are out in the open country amidst clumps of bushes and large detached masses of rock. We hear a strong cry like *Chir* rapidly uttered, and we know that a honey-bird is calling. This creature we see fluttering about on a small bush, as though to attract attention;

and on walking towards it we find it flies off towards a bank of earth, and repeats its cry more anxiously than



THE WILD-BEE'S QUARTERS.

before. Upon approaching the bank of earth we immediately see a number of bees crawling into a hole in the

bank, and there we know is a honey-bees' nest. Lighting a lucifer-match, we burn some grass, and make up a bundle of smoking vegetation, which we place in front of the hole, and proceed to enlarge the opening, so as to get a hand into the inner chamber.

When taking a honey-bees' nest it is necessary to act with the greatest caution ; if a bee, or a dozen bees, settle on your hands or on your face, you must not attempt to knock or brush them off : if you do they will make a peculiar angry buzzing, and will at once attack you, and their buzz of alarm may bring the whole hive on you. If you allow the bees to crawl over you they will rarely sting, at least that is our own experience, and we have taken some dozen or more wild bees' nests, and only once were we stung.

It happened that we found a wild bees' nest in the forests near Natal ; it was in a tree about five feet from the ground, and so large was the opening that the honey-comb could be seen from the outside. Some dead leaves and other materials in the bush enabled us to make a good smoking fire, and we commenced taking the honey. By some means a bee became squeezed between the tree and our hand, and instantly it buzzed in a particularly sharp manner. At this sound the bees flew at us, all buzzing in much the same manner ; three or four settled on our faces and ears and stung us, whilst others made at our eyes. A rapid retreat was made, but not before we had been stung at least a dozen times about the face and head.

Now, however, came the singular experience—viz., that in a country where mosquitoes are formidable, where a fly by its bite kills a horse or an ox, the bee's sting is comparatively a trifle. We did not suffer from all those stings as much as we have from one sting of the redhipped humble bee in England.

To see a flight of locusts, to gather wild honey in an African forest, and then like a patriarch of old to feast on locusts and wild honey, is an experience not given to every one. To look back upon such scenes is pleasant, and to write of them recalls every incident to the memory.



IN THE AFRICAN FOREST.
WITH THE WILD ELEPHANT.





IN THE AFRICAN FOREST.

WITH THE WILD ELEPHANT.

THE morning air is fresh and chilly, for the sun has not yet risen, but the bright gleam in the east is the herald of our glorious centre of light, and proclaims that the sun is rapidly approaching the horizon. The heavy dew is quickly evaporating, and this indicates that a warm, dry day will prevail. This is as it should be, for the bush on a wet day is not a pleasant resort; whilst a dry day, after a dewy night, is the most favourable condition for hunting and spooring.

At about two miles from our tent there is an extensive forest, stretching for miles east and west. It is the border of the South African coast, and is the habitation of elephants and other wild animals. This forest, or bush, as it is technically termed, is a wild waste of under-wood, amidst which grow trees of large size, some that

are never seen except in the far south, and others which attain only to pigmy proportions in our conservatories.

Here grows the giant Euphorbia, whose thick, succulent stem and branches are the dread of the elephant, for from this giant cactus exudes a milky liquid, which blisters even his skin.

Hanging in graceful curves from every branch are rope-like creepers, whose tendrils hold firmly in various directions, and form a network almost impenetrable to human beings.

Amidst this wild, luxuriant foliage are numberless monkeys and birds of brilliant plumage and quaint forms. On the ground may be seen various creatures, curious and rare in their way. Here we may see a strange sort of mat of leaves, which on touching we find to possess life : it is the *manis*, a creature somewhat of the armadillo species, and most curious in its ways.

The leopard and bush cat, the bush buck, and duiker, the gigantic rock snake and the deadly puff-adder, are all denizens of this wild bush ; and thus it is like a well-stocked preserve of some mighty potentate, who delights in exciting sports. But, at the time of which we write, it was wild and free. Then the Anglo-Saxon, with his love of sport, was a rare denizen in this favoured land, and, if he did visit it, his occupation was such that he could not spare the time to devote to bush-hunting or following the trail of the elephant.

Just as the first rays of the sun light up our tent, a



THE WILD ELEPHANT AND HIS COMPANIONS.



stealthy footstep approaches it, whilst a low voice ex-claims—

“Inkosi, ama inglovu pezulu” (“Chief, many ele-phants about”).

“Have you seen or heard them, Inyovu?”

“I heard them last night. They were feeding near the edge of the bush; and this morning I saw their foot-marks in the open plain, for they had been out to the vlei to drink.”

“Why they must have been within half a mile of my tent last night!”

“Nearer, Inkosi, for a young bull elephant stalked out in this direction, and seemed by the spoor to have scented something strange, or heard some unusual sounds.”

“Before the sun has moved four times its own length I will be ready to go on the spoor. In the meantime you prepare for a day in the bush.”

“Here, Inkosi, is the spoor of the young bull: there is where he stood for some time. See his steps were slow and short there; but here he has turned, and has rushed away with long strides towards the bush. He was alarmed then, or he would not have gone away so quickly.”

On looking at this spoor, we can estimate from its shape the size of the elephant whose foot left the impression on the sand or mud, for the height of the elephant is about six times the diameter of the footprint. We know also that it was a young bull elephant, because

the footprint is nearly circular; whereas we should know that a cow elephant had been on the ground if we saw a footprint of an egg shape.

The next question is to decide at what hour the elephant walked over this ground. The Caffre assures us that it was during the previous night; and this statement we find is true, because a whole night's dew has not fallen on the footprint, which would be the case had the elephant left these marks on the night before the last. But we do find some drops of dew on the footprints, and therefore the elephant must have passed some time before sunrise. Also we note that the small stem of a tree, broken off by the elephant in its passage, has its leaves completely withered, and these leaves we know, from previous trial, will look quite fresh for at least two hours after they have been broken off.

Now on the previous night the moon was about three-fourths towards the full; it would therefore set about three hours before the sun rose, because it is always the case that when the moon is full, it sets when the sun rises, and rises when the sun sets. Also, when it is half full it rises about six hours after the sun, and sets about six hours after the sun. Thus the moon set on the night referred to about half-past two o'clock in the morning. Having considered these facts in connection with the trail, we say to the Caffre, "The elephant was here after the moon went down."

"Yes, chief; soon after, I heard the elephant scream, and it was here he did so."

Farther on we see the footprints of other elephants. There are bull and cow elephants as well as quite tiny young ones, and they have enjoyed the luxury of elephants—a roll in the mud. Here in the soft soil are huge, flattened portions of ground, on which the giants have lain in order to smear themselves over with mud, and thus to protect their hides from the attacks of the mosquitoes during the heat of the day.

Now this mud will enable us to follow the elephants quickly, for it will be wiped off by the trees and leaves near to which they will pass, and thus at a glance we can tell where the elephants have gone; for sometimes we can obtain a good view in the bush of distant trees, and thus if they are smeared with mud we can make for them quickly, knowing that we are on the right road.

Our Caffre points out to us a portion of the bush where, he states, the elephants entered the cover, and for this spot we now walk. The bush is at first open; there is a dry brown creeper, which has died off to a great extent, and can be easily seen through; there are many large trees, and the usual wild vine trailing about them. We pass this and follow the well-trodden path pursued by the elephants during the night, and here we walk quickly, for in this open bush we make no noise, and we can see round us some forty or fifty yards, and so are not likely to run against an elephant before we know of his proximity; but soon a different style of bush is approached.

Now we come to dense portions of underwood matted

together ; and about ten feet high, it is so thick that it may be compared to a quickset edge, overgrown with ivy and honeysuckle. The only possible means of progression here is to force one's way along the path which the elephants made some hours previously ; and even this is not easy, for tangled vine and stout branches are across the path, and it is necessary to protect one's face with one's arms in order to force a way through such an obstruction ; and it is now that caution and carefulness are required.

An elephant in his own bush is not to be intruded upon with impunity ; he is at times very savage, and at once resents the invasion of his stronghold. With a blow of his trunk and a tread from his foot a man will soon be favoured, and after such treatment no one lives to tell his tale.

Before we enter this dense matted vegetation, it is therefore necessary to wait and listen before we venture to advance. Our Caffre, in the most business-like way, squats down, placing his gun on the ground and taking a large dose of snuff from his reed snuff-box that, like a huge ear-ring, has been thrust through a hole pierced in the lobe of his ear.

We wait at least ten minutes beside this thick cover, for if an elephant be near us we shall hear some noise which will plainly enable us to discover it.

He will blow through his trunk, or move his huge legs, or his vast interior will make a rumbling noise which is plainly audible at fifty yards, and thus we shall avoid

advancing within reach of his trunk without knowing we are near him.

No sound indicating that a elephant is near, we cautiously advance through this thicket for nearly a hundred yards, after which we come to a thick grove of acacias and of larger trees. Here the elephants have evidently stopped to feed; branches of large size are broken off the trees, and are ground up and smashed by these creatures, as they feed on the tender young twigs at the end of the bough, whilst they hold down the thick ends under their feet. If they had only stayed here until our arrival, we should have obtained a splendid shot at them; for we can here see forty or fifty yards all round us, and there are some stout-stemmed trees, around which we might dodge a single elephant; but these cunning animals know perfectly well the style of bush in which they are safest, and will not remain by day in a part that is open, if they suspect that hunters are in their neighbourhood.

We have now made several turns in the bush, for we have followed the trail of the elephants, and it is necessary to find out whether we are going up wind. If the wind blow from us to the elephants, they will know of our approach, though we may be three hundred yards from them. So to discover how the wind blows here, we take up a handful of dry earth, crush it in our hands, and throw it up in the air; the dust will show in which direction the wind is blowing.

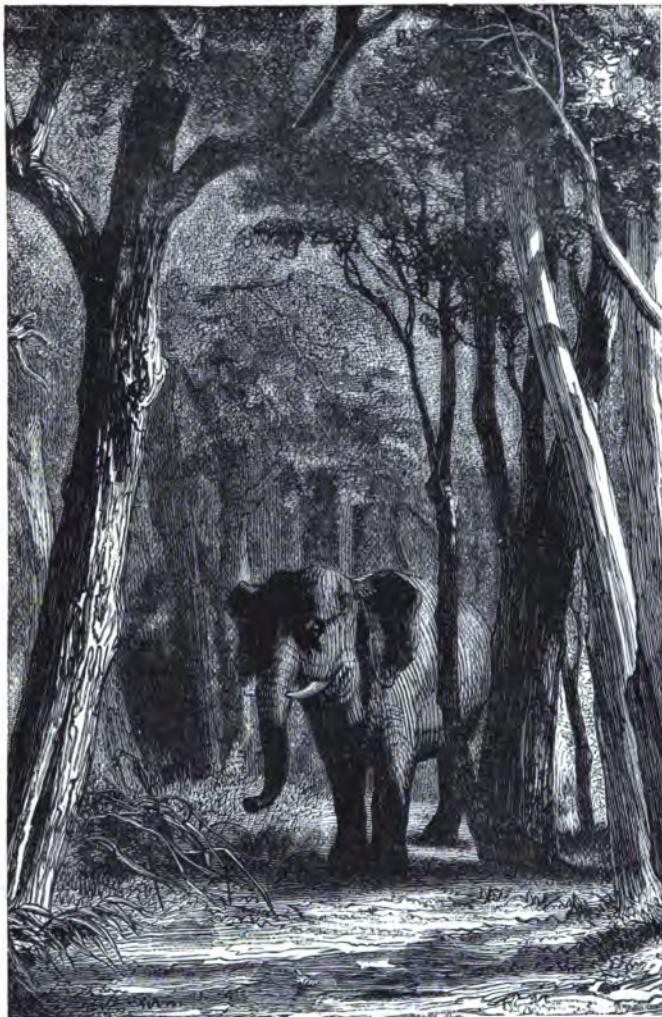
As we advance through the bush there is a sudden

rustling noise somewhere near us ; we stand on the alert expecting to see an elephant, but nothing is at first visible, though the rustling of leaves and branches continues. The cause of the noise is high up in the trees ; there we see a troop of the little grey monkeys hopping from bough to bough as they endeavour to escape from our sight.

Suddenly a sharp, shrill trumpet note is heard, like that of a bugler suddenly cut short in his call. It is at some distance, but how far off it is impossible to tell ; but it speaks of power and watchfulness. We listen for some other indication, but nothing is heard ; so our Caffre proposes to advance, and then again to sit and listen.

A few hundred yards on we suddenly stop, for there close to us we see a mass of thick underwood moving as only an enormous animal could move it, the Caffre raises his arm and points at that part of the bush, and then glances round to see what part of the bush seems the best suited to retreat to, for to stand still in the bush after you have fired at an elephant is a piece of folly that no skilled hunter will commit. If the elephant charges, as he will probably do if the bush be thick, and he a full-grown bull, he will rush straightway at the smoke, and as he will carry everything before him he will probably smash the hunter before the latter can slip away.

Suddenly from the mass of moving underwood there comes a deep rumbling sound, then a sharp blowing noise like wind forced through a pipe. The elephant is suspicious, and is testing the air with his olfactories to



THE WILD ELEPHANT AT REST.

N



find what danger threatens him. Having found that some strangely scented creature is near, he stands still as a statue, his huge ears erected, and his ponderous body ready to bear down on his enemy; but as yet only his ears are visible, his head is hidden by a mass of branches and leaves, and his body wholly concealed by the under-wood. This is an intensely exciting moment; our lives now depend on our activity and skill in dodging or running, for we do not expect to kill this giant of the forest with a single bullet; and when he is badly wounded he becomes more than ever savage and dangerous.

As we stand with rifle ready, and intently watching the bush in which the elephant is concealed, we hear, close to us and on our left, a slight crack, caused by a broken branch; the noise is so small, and all else near where this noise is heard is so quiet, that a person unaccustomed to the cunning of wild animals, and especially to that of the elephant, would pay no attention to this sound. To a skilled bushranger it is different; to him this noise is a cause for watchfulness, and as he stoops down and peeps through the underwood, he sees the huge legs of an elephant within twenty paces of him, the animal itself being entirely hidden by the masses of foliage amidst which he stands.

This proximity of another elephant complicates matters, for others may be behind us, and our retreat may be cut off. Thus whilst being chased by one elephant, we may rush against another, and our sport and career be ended together.

The Caffre doesn't like it ; he shakes his head, signs that there are *two*, and looks behind him as though anxious to back out of his present position. But the elephant before us has become impatient, and wishes to gratify its curiosity. With a couple of strides it forces aside the underwood, and steps forth with expanded ears and erected trunk to see what danger threatens him and his companions.

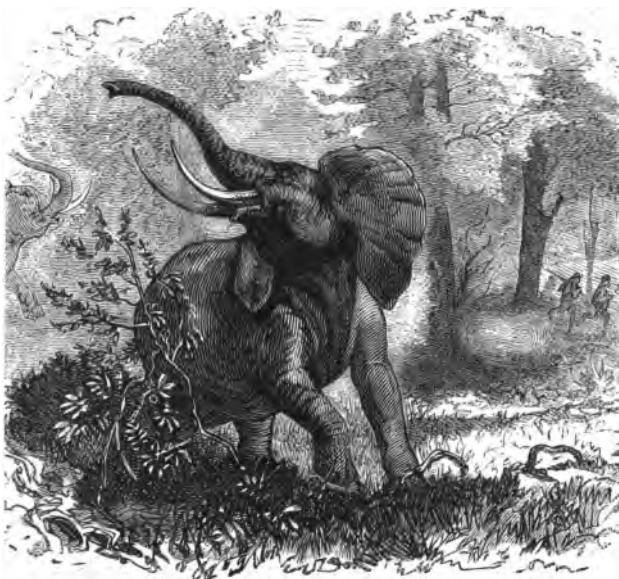
As he thus comes into sight, looming large even among the fine trees around him, he is a splendid specimen of animal power and watchfulness ; his head is thrown back, and his large tusks point in the direction in which he expects a foe. Rapidly his body sways from side to side as he scents the air in each direction. There is no sign in this animal of that lazy lethargic nature which one somehow is disposed to attribute to the elephant ; but he seems as active as a cat when looking out for a mouse.

There is no time to lose, for we must surprise him ; so, raising our heavy rifle, we take the animal at the instant when he shows a portion of his broadside, and, aiming at his chest, we discharge our heavy rifle, and the previous silence of the bush is broken by the reverberation produced by its report.

Without attempting to see through or under the smoke of our rifle, we turn and bound down the path by which we approached, and thus retreat a hundred yards or so ; then we stop to listen ; but no sound at first is audible ; then, however, we hear a crack like that of a snapped

branch, then another more distant, and we know the elephants are in retreat.

Instantly reloading, we retrace our steps, and now with even greater caution than before, for now our presence is



THE ELEPHANT IN RETREAT.

known, and we believe it has been felt, and the elephant, wounded as it is, will not be likely to spare its enemy if it get a chance.

Here is the spot on which we stood, and there is the

bush before us out of which the elephant strode. Here, on the left, is where the second elephant was concealed, and we see how lucky it was we retreated when we fired, for this elephant, though it had not felt a bullet wound, had yet charged straight over the ground on which we stood when we fired. The Caffre sees this trail clearly marked on the ground, and he shakes his head and covers his mouth with his hands as he looks at it, and thinks of what would have happened had he stayed where he was. He does not now consider that the hunting medicine which he purchased from the wizard doctor is dear, as it was most likely that string of roots round his neck which saved his life on the present occasion, and enabled him to get away in time.

We look anxiously towards the spot on which the elephant stood. There is a faint hope that we may see him lying there; but there is nothing visible but bush. The elephant has disappeared, but not without leaving a sign behind him, for our Caffre points out a few drops of blood on a leaf, and shows the trail of the elephant on the ground, which indicates that the monster turned when he was hit, and retreated into the forest.

We must follow now on the blood spoor, and rapidly too; the elephant must have no rest, and perhaps another bullet may be lodged in him before another hour has passed, and then twenty or thirty pounds worth of ivory will be ours, and a tail will hang against our tent pole as a trophy of our day's sport.

Like a hound that scents blood, the Caffre now moves

onward with rapidity ; for our course is easily marked for us, as the elephant has been hard hit, and is evidently mortally wounded, for it bleeds not only from the body, but from the trunk also.

It is wild in its rushes through the forest ; here it has charged right against a stout tree, from the stem of which the bark has been carried off in quantities, and the branches of which are smashed and broken.

Soon, too, we find that the wounded animal has separated from the other members of the herd, and is following his track alone—evidence that he is badly wounded, and, like a sick man, seeks to avoid the society of his fellows.

On and on through miles of bush we follow the wounded elephant. The sun has approached the zenith, and is now sinking towards the west, and we still seem no nearer our journey's end ; for the game we are pursuing is a tower of strength, and, though he may die, yet he will not yield his life in a hurry.

At length we stop ; the intense heat in the bush, and the exertion we have gone through, compel us to desist for the present ; and, on calmly considering the case, we find that, unless we are prepared to pass the night in the bush without food and without water, we must escape from its tangled mazes before the sun sets ; and so we draw off from the trail, determined to take it up on the morrow.

Before sunrise on the morrow, however, a terrific thunderstorm visits us, and the rain washes out every

sign of the trail ; to attempt to follow the elephant would be useless, so we enter the bush in the hope either of coming on the dead elephant or finding other members of the herd ; but these animals are very cautious, they will not stop in a district where one of their members has been badly wounded, and so the bush is now tenanted only by bucks and monkeys, wild pigs and the smaller wild beasts.

It is not long, however, before we have reason to believe that our shot was a fatal one ; for on the second day after that on which we wounded our game far away in the east, in that direction in which the wounded elephant retreated, we see some specks above the forest trees ; by the aid of our telescope we discover these to be vultures, they are circling above the trees, and at length descend among them, and this proceeding we know to be a sign that some carrion lies in the forest, and is attracting them.

“ Saddle the pony, Inyoru, and come with us. See the vultures yonder.”

The Caffre shades his eyes from the sun, and looks intently at the distant bush.

“ Yes ! ” he suddenly exclaims, “ they are vultures. Our elephant must be there. Let us go.”

In half an hour we have crossed the river that separates us from that part of the bush above which the vultures are wheeling, have knee-haltered the horse, and entered the bush.

Half an hour’s quick walking, during which we are

guided partly by our previous observations, partly by the flight of the vulture occasionally seen, and then we catch sight of a black mass on the ground, above which are the weird-like forms of several vultures. We approach this mass, and soon recognise it as a dead elephant, from the carcase of which scamper two hyenas and several jackals, who have been feasting at their leisure. The elephant has evidently been dead some time—the Caffre declared twenty-four hours at least—but short as this time is, he has been partly eaten by hyenas and other wild beasts.

We passed round in front of him, and there see on his chest the mark of a bullet wound. It was where we had struck with our bullet the bull elephant two days previously. But as we glanced towards the monster's head, we see the reason for the Caffre's muttered words. We have been forestalled; some one has visited the elephant before us, and has extracted the valuable tusks. There is the trunk cut up at the sides, so as to clear the tusks from flesh, and there are the empty sockets in which the tusks rested. We have been robbed; but there is no redress, even if we could discover the thief, and bring home the theft to him. So we cut off the useless tail, and return to our tent.

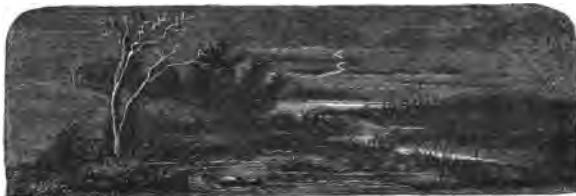
Several months elapsed before we discovered how we had been deprived of our prize. We then learned that a Hottentot in the bush, searching for wild honey, saw the wounded elephant pass him, and seeing how near death it was, followed it till it fell, which it did soon after sunset on the day it was wounded. With the

hatchet that he used to cut out the bees' nests from the trees, he cut out the tusks of the elephant, and carried first one and then the other to the edge of the bush, where he concealed them till he had a chance of selling them.

Though on this occasion we were robbed of our spoils, still we had our reward in the excitement of sport, and in viewing in its native wilds the lordly elephant, whose size, sagacity, and enormous strength render him one of the most interesting quadrupeds in creation.

IN THE WILDS OF NATAL.
WITH SERPENTS.





IN THE WILDS OF NATAL.

WITH SERPENTS.

PART I.

AMONG the many peculiar constructions of nature, there is not one which appears to me more singular than that of the snake. To see a creature without legs able to glide along the ground with great rapidity, to climb trees, and, though possessed with jaws of but slight power, yet able to crush by its embrace creatures of considerable strength, is really a wonderful sight. When, too, we find that some of these snakes grow to such a size as to render them formidable and dangerous opponents even to man, they naturally are looked upon by all persons as most interesting creatures. Thus, some few remarks as to their habits and peculiarities will, I trust, be interesting; especially when a knowledge of the private life of these monsters has been gained in conse-

quence of visiting them in their wild homes in the African forests.

There are several species of pythons or boa-constrictors, inhabiting various parts of the world, and growing to a great size. These are known as the boa-constrictor, the anaconda, the rock snake, &c. The particular species to which I shall here refer is called the Natal Rock Snake, or Port Natal Python.

This serpent was not uncommon in the Natal district during my residence there many years ago. This fact will be evident when I state that the python usually lies concealed at least six days, and roams about in search of food one day: thus, though there may be many snakes in a certain locality, yet it is not likely that a person merely riding over the country should see even one-tenth of these. Yet, during my residence of two or three years at Natal, I shot seven pythons, each of which exceeded sixteen feet in length. I killed eight or nine varying from seven to twelve feet in length, and I "let off" at least a dozen others, whose habits I wished to study, or who escaped because I would not alarm the animals in the vicinity by firing off a gun at such unprofitable game.

The python of Natal grows to a very large size, and as in the *Field* newspaper various inquiries were made some time back as to the measured size of various snakes, I take this opportunity of recording the dimensions of some of the pythons I shot. The measurements were made immediately after death, and when consequently the skin had neither stretched nor contracted. The largest python



A SNAKE COLONY.



was twenty-one feet six inches in length, and measured twenty-seven inches round the body. It was of a beautiful olive and yellow colour, spotted with yellow and black spots, having a gloss on its skin similar to that seen on a ripe plum. Another python that I killed measured sixteen feet, and was twenty-six inches in circumference.

The weight of these creatures could only be roughly judged of ; but a fair estimate of their weight can be made from the following description :—A rietbok, that weighed ninety-five pounds, I could lift off the ground and place upon my pony's back, but the python which was only sixteen feet long I could not raise from the ground more than a few feet, and even then a great part of the creature was upon the ground. Thus, if I were to give a guess at the weight of such a snake, I should say it was two hundred pounds at least.

The pythons as well as the boa-constrictors destroy animals by crushing them in their folds ; these snakes have no poisonous teeth as have several smaller snakes, and are not therefore dangerous to man ; at least, they are not so if he is armed and on the alert. Still, there is no doubt that if one of these giant pythons once coiled itself round a man's body, the man would very soon be so squeezed as to be suffocated, though the snake is, I believe, disinclined to attack a man.

The first python I ever saw in its native home was a very large one. I was riding over some down-land about six miles west of the bay of Natal. Seeing the long grass moving in a suspicious manner, I rode towards it, and

just caught sight of an enormous serpent gliding into an immense hole. This hole had been made by an ant-bear or a porcupine, and was big enough to have allowed a man to crawl into it. I did not fire, as the snake's head was not visible, and a dead-shot was therefore impossible.

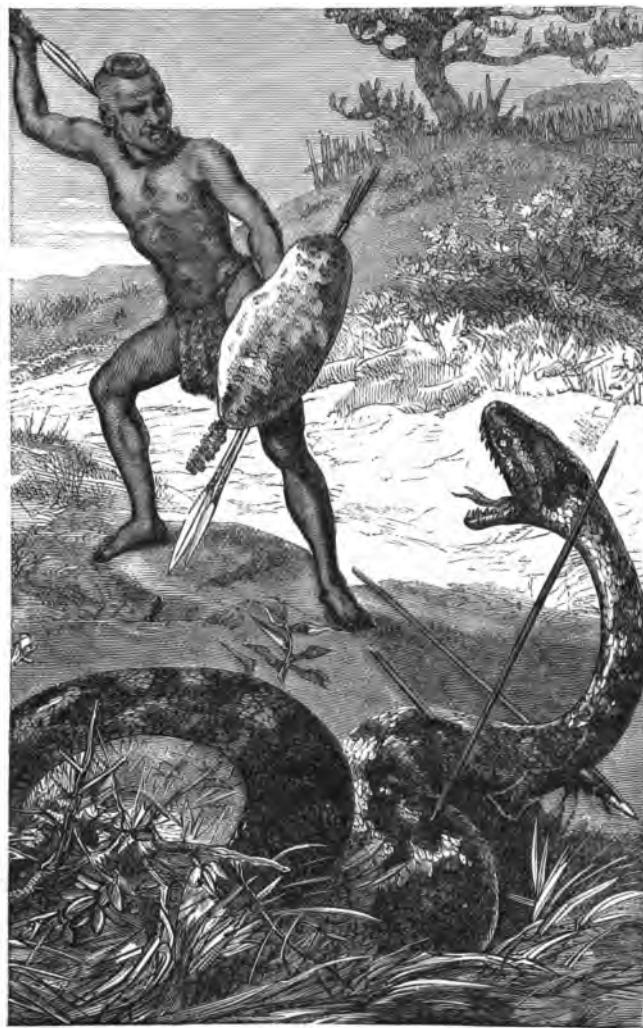
Shortly after I met a Caffre, who informed me that this snake was his enemy, as it had killed and swallowed a calf of his about ten days previously. Upon hearing this intelligence, I informed the Caffre of the snake's locality, and he intimated his intention of watching for his enemy.

Two days afterwards I was riding in the vicinity of the snake's residence, when I heard a Caffre shouting from a distance. Upon riding up to the man, I found him smiling and very proud, the reason for which was, that on the ground was an enormous python pinned down by about half-a-dozen assagies, and to all appearance dead.

Upon pacing the length of this snake, I found it eight good paces, so that I estimated the length at about twenty-three feet.

The Caffre gave the following history of the capture of the monster.

From sunrise in the morning until sunset on the day after my visit to his district, he had watched the snake's hole, but saw nothing of it. On the following morning he again examined the snake's hole, and saw at once that it had moved out during the night. Now a Caffre can follow any creature by sight just as a dog can by scent, and so the Caffre followed the trail of the serpent, and



THE CAFFRE AND THE PYTHON.



soon noticed that the monster was gliding towards the grazing ground of his cattle, most likely with the intention of eating more veal. This idea added speed to the Caffre's feet, and he soon came within sight of the python, as it was slowly advancing towards its prey.

As soon as the creature knew it was pursued, it made away towards some reeds and marsh; but the Caffre boldly pursued it, and when within a few yards of it, hurled one of his sharp assagies at the monster. A Caffre is a very good shot with a spear, and on this occasion he transfixed the python with his first shot. One assagy, however, merely stopped the snake, but did not entirely disable it. The creature turned and showed a determination to attack its pursuer, but several other assagies having been driven into the snake, it was soon helpless, and was then pinned down to the ground in the manner I had seen it.

Some time after this first adventure with a python, I had a very close interview with the largest I ever killed. Happening to be out shooting, and in search of buck, about six miles from Natal Bay, I was riding with a friend and attended by a dog. This dog was of the pointer-breed, and was very fond of turning a buck out of cover.

The country over which we were riding was like an English park, in which were small patches of brushwood about the size of a comfortable drawing-room. At one of these patches of bush my dog stopped, and commenced acting in a very unusual manner. He pointed at the

bush, then wagged his tail as he looked round at me, then drew back as though afraid, and so on. I at once knew that some strange game was in the bush, and I suspected that it was either a leopard or a porcupine; so, dismounting from my horse, I ran to the bush ready for a shot, my friend doing the same.

On looking cautiously into the bush, my friend started back, exclaiming, "It is an enormous serpent!" At the same instant I saw the heavy thick body of the python slowly gliding towards my dog.

Raising my gun, I sent a charge of shot into the snake's body, and jumped back so as to avoid any attempt of the creature to spring at me. Having loaded the empty barrel, I approached with great caution, holding my gun ready, and peeping among the leaves and branches to catch sight of my enemy.

It was well I did use caution, for the instant I moved the branches the serpent lunged forward, making a dart at my face as rapidly as a cat springs on a mouse, his enormous jaws open and extended wide enough to have taken my head in them. I was just beyond the monster's reach, or he would have pulled me down on the ground and probably have crushed me before my friend could have cut or shot him. Before, however, another dart could be made at me, I sent a charge of shot into the python's head, which at once killed it.

On dragging out with considerable difficulty this serpent from the bushes, I was surprised at the beauty of its colouring and its enormous size.

The size at first is deceptive ; when an animal is seen on the ground among trees and bushes, it looks small, but when it is handled or seen near, it looks far more formidable. So it was with this python. At first I fancied it was little more than twelve or fourteen feet in length, and that probably I could have dragged it along the ground, or knocked its head against a tree if it had attacked me ; but when I found that two of us could scarcely drag it along the ground, and that whilst as big round as a man's thigh, it was twenty-one feet in length, I realised what a formidable monster it was, and how poor a chance a man would have if he once allowed a serpent of this size to coil round him.

I believe the largest snake I ever saw was in the forests on the coast eastward of Natal.

This snake was moving through the forest apparently in search of food, but it seemed rather lazy, and was gliding along scarcely as fast as a child could walk. I was sitting down in the bush with my hunting Caffre, when our attention was drawn to the snake by the noise it made among the leaves and broken branches. Caffres have great fear of any animal with which they are not thoroughly familiar, and this man informed me that the snake was a deadly poisonous one, and very fierce also. As, however, I recognised the python at once, I knew it was not poisonous, and so determined to follow and watch it to see what it was about. I had no fear of being attacked by it, for I was armed with a double-barrelled gun, with which I could have

shot the serpent, so I placed myself in its path and waited its approach.

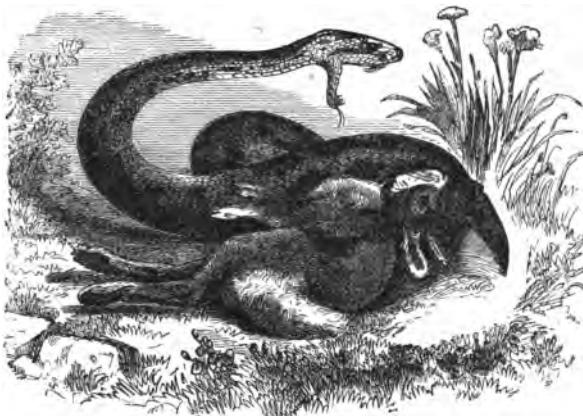
The creature came gliding along slowly and apparently unconscious of my presence, until within a few yards of me. It then evidently had reached its home, for it gradually disappeared into a large hole, coil after coil passing into the mysterious retreat, until at length nothing was manifest but the tail of the serpent. From the estimation which I made at the time, I believe this snake was fully twenty-five feet in length.

Near the hole into which this python had glided there was a quantity of sand, over which the creature had passed. On this sand the trail or spoor was clearly marked, so that I at once examined this, in order to get my eye accustomed to the spoor of a large snake, and also to be able to judge in future what the size of snakes must be in order to leave certain marks. From the information thus gained I was enabled to form a very correct judgment of the size of snakes when I saw their traces, and on one occasion was astonished to see on the banks of a stream near Natal traces which could have been left only by a gigantic serpent.

This serpent, I believe, must have been above thirty feet long; and my belief was strengthened when I had communicated with an old Caffre, whose kraal was near. This man asserted that the snake had killed and eaten a half-grown cow, and that it was so long that its head was on one side of the stream before the tail had entered the water on the other side. On examining the stream where

the snake had crossed, it was evident that, if this report were true, the snake must have been above thirty feet in length.

Such a size as thirty feet seems marvellous ; but having killed and measured a snake twenty-one feet in length, I think it very improbable that this particular creature was



PREPARING TO SWALLOW A HARE.

the biggest in the district, and thus thirty feet does not seem to me an improbable length to be attained by a python.

The python, as well as other snakes that destroy animals by crushing, are very formidable to monkeys and baboons. These snakes climb trees with great ease, and when hidden among the foliage cannot readily be seen ; thus a monkey, skipping from branch to branch, suddenly

alights on a python, is seized with the rapidity of a tiger's spring, is held by the powerful jaws, and instantly folded over and over again by coils of the creature's body, and crushed to death in a few seconds of time.

The swallowing process is slowly accomplished by the pythons ; they swallow their animals entire. And if the creature happen to be a bustard, a guinea-fowl, or a duck, down go feathers and animal together. There is no picking or carving process to go through, but the python dines off his animal without any preparation.

In the Zoological Gardens there are two or three very fair specimens of the python, though they are small compared to those one sees in their native wilderness. Still, I believe two, at least, of those in the Gardens must be twelve feet long.

During a visit to the snake-house in the Gardens I was witness of a curious scene between one of the largest pythons and a small one in the same cage.

The large python was occupied in swallowing a duck, when the smaller one glided up to him, examined his tail, and suddenly darting at it as though it were "game," coiled itself round, and commenced trying to crush its big companion. The pressure was evidently unpleasant, as the large snake tried to free itself; but as a duck was half-way down its throat it seemed helpless, and had to endure the unpleasant squeeze. The keeper's attention was soon drawn to the knotty mass, and the man, by a few blows with a stick, and by hauling at the creatures, managed to get them uncoiled.

Strange and wonderful as are many of the animal creation, there are few which seem so remarkable as the larger species of snake ; creatures which climb without arms, and move rapidly without legs, who swallow their food whole, and kill it by squeezing it, are what may be termed originals ; and yet these are but one branch of the snake kind. The other branch, which destroys by a subtle and mysterious poison, is equally as marvellous, and to these we will draw attention at a future time, as we have had the opportunity of seeing very many poisonous snakes at home and in all the pride of their power.



IN THE WILDS OF NATAL.

WITH SERPENTS.

PART II.

THE most repulsive looking of all snakes is undoubtedly the puff-adder.

This creature takes its name from a habit it has of puffing and swelling its body when alarmed or enraged. It is for its length the thickest snake in existence, and its cold, glassy eyes, broad venomous-looking head, and scaly skin give it the appearance of a most vicious monster.

The puff-adder attains the length of four or four and a half feet, and is as much as a foot in circumference. Its tail, instead of being thin and tapering, as is the case with most non-venomous snakes, is thick and stumpy : this peculiarity distinguishes almost all poisonous snakes from those which are not so. Thus any.

person may at a glance discover which are and which are not dangerous.

It is of the utmost importance that every person should know at once when he sees a poisonous snake, for to be bitten even by an English viper often produces lasting and dangerous results, and in many parts of England vipers are common. Last summer at Godshill, in the Isle of Wight, we came upon two very large vipers in a meadow. They were so occupied with one another,



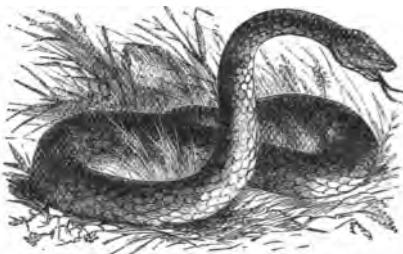
THE VIPER.

that had we not been watchful and on the look-out for such creatures, we should certainly have trodden on them, and a bite, with all its dangerous and painful results, must have been the consequence.

Two years ago, in the New Forest, a lady of the party called our attention to a "beautiful little snake," just in front of her foot; on looking at it we recognised a viper, with head erect ready to strike on the slightest movement. To cut it down with a stick was of course the immediate

proceeding, whilst much surprise was expressed by the lady to learn that so pretty a creature could be dangerous.

Now had this lady been aware of the poisonous nature of the creature before her, she would have been less incautious, and she ought to have known at a glance the nature of the snake; for, be it remembered, the viper has a dark chain of broad spots down its back, has rather a broad head, and a stumpy tail, all plainly distinguishable at a glance. Notice these facts, and we trust no reader



THE COMMON SNAKE.

of this article will be bitten by a viper, in consequence of not knowing it to be venomous.

We actually know a case where a boy caught a young viper and carried it home, believing it to be a common snake. He was bitten by it the next day, and did not recover the effects for some months.

Among country-people there is great ignorance in connection with poisonous snakes. We were once gravely informed by three men in the New Forest that the blind

worm was very venomous, whereas the poor creature is as harmless as a fly.

But to return to the more deadly species found in Africa.

The puff-adder is found in woods, hidden among the stumps of trees, in holes and crannies of rocks, in the thatch of houses or huts, and under masses of brushwood, or among dead branches.

Those who have lived in a country frequented by poisonous snakes, get into a habit of watchfulness, and know by instinct, as it were, when they are in a likely place for snakes, and thus rarely meet with an accident through carelessness.

The puff-adder is particularly dangerous, in consequence of its lazy, indolent habits. It will lie sleeping in the sun, and will probably not awake until trodden upon by the incautious pedestrian, whose first intimation of his danger will be the sharp prick of the serpent's tooth. If the puff-adder does move, it will be merely to assume a threatening attitude, as though it knew full well that it possessed the power of life and death in one dart of its head.

Luckily, the colour of this snake is rather brilliant, and, if in the plain lying on grass, can be easily seen; but when it is among broken branches and dead leaves it requires a trained eye to distinguish it.

One of the largest puff-adders we ever saw we aided in killing.

About a mile from the village of D'Urban, at

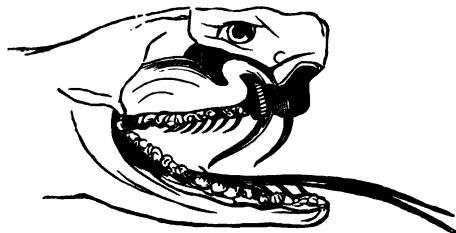
Natal, there was an extensive forest or bush, as it is there called ; through this bush there was a narrow road which was being widened. Many trees had to be cut down and stumps uprooted in order to clear the ground. A large party of Zooloo Caffres were engaged at this work, and had killed many snakes which they found among the roots of trees and in holes in the ground.

While watching these Caffres at work one day, we suddenly heard a shout, and saw a Caffre spring back in the greatest alarm. Dismounting from our pony, we approached the spot, near which several Caffres were rushing about. These men called to us in a warning tone *Inyoka kona* ("A snake is there"), whilst they pointed to a large stump of a tree, which they had partially uprooted. There, coiled up on the stump, with head erect, and body swelled with rage, was a gigantic puff-adder. It looked an embodiment of rage and venom as it turned its head towards us, and raised itself as though preparing to spring.

We soon arranged an attack on the snake, in the following manner. About a dozen Caffres formed a ring round the snake, and distant about ten yards from it. These men were supplied with large stones, and thus a regular pelting match began. As the stones whizzed past it, the adder turned its head rapidly in the direction from which the last stone came, and puffed and swelled with rage. For some time the creature escaped being hit, but at length a lucky shot was made, and the monster was struck on the head, and almost killed.

No sooner was the snake down than it was battered to pieces with stones ; the head was cut off and carefully buried, and the body thrown among the bushes. During the next day I heard that several young puff-adders had been turned out of the same stump, and killed by the Caffres.

All the poisonous snakes appear at times to suffer inconvenience from the poison-bladders becoming surcharged with poison. Thus snakes are at times anxious to bite anything, and thus to get rid of some of their



THE HEAD OF A POISONOUS SNAKE.

poison. This is, we believe, the reason why snakes sometimes attack men without any provocation.

We had once a very narrow escape from a puff-adder which seemed in this vicious state. We were riding along a well-beaten waggon track, when we saw at the side of the road a fine puff-adder. Having seen two or three Caffres on the road some hundred yards before us, we concluded that these men had killed the snake, as it lay so still that it indicated no sign of life.

Being desirous of obtaining a good skin of the puff-adder, we dismounted and approached the creature, which had its head partially concealed by the long grass.

When within about a yard of it, we saw a slight movement of the tail, which we knew meant watchfulness, and indicated that the creature was alive. We had scarcely noted this fact before the adder suddenly sprung backwards, almost turning a summersault. Fortunately we were too quick for it, and avoided its spring; whilst before it could recover itself, it received three or four severe blows on the back and neck with our sjambok (riding-whip), which entirely disabled it, and its skin fell to the lot of a naturalist in the neighbourhood.

We once found a puff-adder engaged in swallowing an enormous toad. The toad was being quietly drawn into the throat of the snake, and was alive. Having a deadly enmity towards all poisonous snakes, we commenced an attack on this creature with our sjambok, one or two blows being administered to it with sufficient force to break its back. The result was unexpected. The snake seemed to reverse the order of its swallowing, for the toad with a few extra struggles freed itself from the jaws of the snake, and, apparently none the worse, waddled away into some long grass. We killed the snake, and then watched the toad for fully a quarter of an hour, but saw no sign of its having been poisoned.

It may be that a poisonous snake bites only those creatures which its instinct tells it would escape by their speed. Thus birds, rabbits, mice, and rats, being fleet,

would easily escape; but a toad, being a slow creature, is easily captured by a snake, which need not therefore use its poisonous fangs in order to secure its prey.

There was at Natal a large stout black snake, which the Caffres declared was poisonous. Only once we had an opportunity of seeing one of these brutes. It was basking beside a large hole, and was seen by our dog, who, having no experience of poisonous snakes, rushed towards the moving monster, and was with difficulty stopped, when only within a few yards of it. The snake looked a most repulsive brute as it raised its head threatening our old dog, and rapidly moving its tail. To shoot this monster was an actual satisfaction, and a charge of shot was lodged in the creature at a distance of about thirty paces. So strong was the life in the reptile that it was not killed by the charge of shot, but wriggled itself into its hole, and disappeared. This snake we estimated at about seven feet long, and it was the thickest for its size we had ever seen, and certainly appeared the most venomous, its broad head, stumpy tail, and general aspect indicating poison.

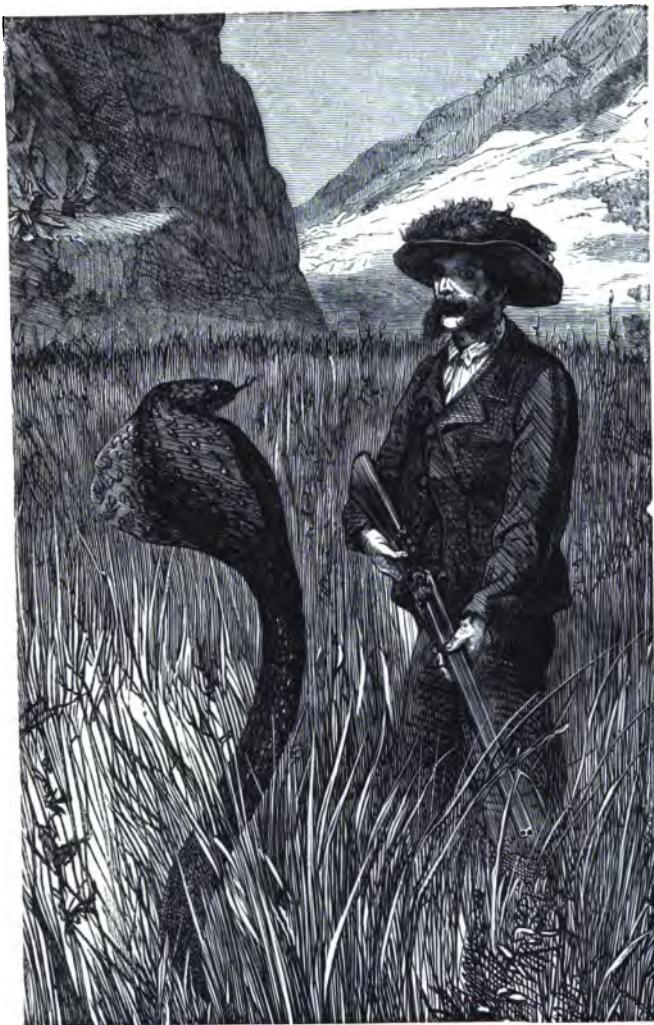
On another occasion when shooting among some ravines near Sea-Cow Lake, Natal, we were walking through some long dry Tambookie grass, looking for a small buck called a duiker, which was common in that neighbourhood. Snakes were plentiful here also, so that it was necessary to be cautious, and to note where one put one's foot on the ground.

As we slowly pushed our way through the long

grass which stood up as tall and as strong as a field of wheat, a large cobra, or spuugh-slange, as the Dutch Boers term it, rose from almost under our feet, and assumed a threatening attitude. Its hood was spread, and its head was raised nearly as high as our face. On the first indication of a moving object, we cocked our gun and stood ready for a shot; but when we saw the snake in such close proximity to us, we dared not raise the gun to fire; we knew the snake's habits well enough to be aware that if we moved we should probably be struck at once; we therefore remained immovable for at least a quarter of a minute, the snake still maintaining its threatening attitude. The reptile then turned, and glided rapidly away. This was about the only snake of a poisonous kind that we ever allowed to escape, but as the creature had undoubtedly for some seconds our life in its power, and did not destroy us, we felt it would be ungenerous to shoot it as it glided away, and so the spuugh-slange escaped.

This serpent is usually very fierce, and ready to attack man on the slightest provocation. It has also the peculiar habit of spitting poison at an enemy, and from this result blindness often ensues. We were told of this singular practice by Hottentots, Caffres, and Boers. Thus, though we never saw the creature perform this feat, we considered the evidence that it did so very good.

Upon publishing our first book some twelve years ago, in which we mentioned this practice of the snake, we



SURPRISE BY A PUFF-ADDER.



were severely blamed by a learned critic for our credulity in believing "such nonsense," and were recommended to be more cautious in future. This critic, however, who had probably gained his experience of African poisonous snakes in the suburbs of London, was, we found, as ignorant as he was bold ; for the spitting-snake has been familiar to naturalists for many years, and to them it was no more surprising to hear that the snake spat poison, than it would be for an English boy to hear that a wasp could sting. We mention this fact in order to warn our young readers not to be prevented from speaking what they know or believe to be true, merely because some self-sufficient and ignorant person attempts to cast ridicule on their statement.

We were once hunting among some low bushes and long grass for a chicken that had concealed itself there, and were armed with a Caffre knobstick. As we moved the grass on one side with the stick, we noticed an object moving differently from the grass, and at once recognised a cobra within a foot of our legs. The stick, however, was the object that enraged the reptile ; and a dart was made at the stick, and it was struck by the creature. In the next instant we had struck it down by a sharp blow, and broken its back. It proved to be a half-grown cobra, and was apparently very fat and in good health.

People who live in a country inhabited by poisonous snakes soon become very watchful ; thus accidents do not occur as often as might be supposed. Yet deaths do

occur from the bite of snakes, in spite of all the precautions that are adopted. We saw one man, a Caffre, who was killed by the bite of a cobra. The creature was in a faggot of wood on which the man trod, and it bit him in the leg. He died two hours afterwards.

There is a plant that grows in India, and is termed the *Aristolochia Indica*, which is said to be a cure for snake-bites. It is a creeping-plant, and grows well in most hot countries. This leaf is pounded and water added, and then is swallowed. In America another species of the same plant grows, and is called the American Snake-Root, or Virginian Snake-Root.

In Ceylon a stone is manufactured, it is said, from horn, which is placed on the snake-bite, and is supposed to extract or absorb the poison from the wound.

In Australia it has been found that hartshorn injected into the veins is an antidote for snake-bite, and it has succeeded well.

In concluding this brief notice of poisonous serpents, we will venture to offer two pieces of advice.

First, let every person try to learn the appearance of the poisonous snakes in the country in which he lives, so that, when he sees one, he at once recognises it, and acts with caution. In England this knowledge is soon acquired, yet it is neglected too often, and with unfortunate results. As an exhibition of such ignorance, we will relate an incident that occurred to us some two years ago.

Being at Lyndhurst, in the New Forest, we ob-

served some chickens of a very valuable breed running after one another, just as these fowls do when they have anything which they cannot swallow at once. We soon noticed that a fowl was carrying in its beak a young viper about nine inches long. The viper was held by the neck so that it could not bite the fowl, but it still riggled about in a very unwormlike manner. We pursued the fowl, which dropped the viper immediately at our feet, when a blow from a stick killed it.

Seeing the fowl-owner near, we carried the viper to him, and asked him if he knew what his fowls were carrying. The man, with that self-sufficient air which is always an attendant on ignorance, replied, "Oh, I don't know, and don't want to know. I calls all them things worms or lizards." Now, had this man happened to handle the "worm" before it was dead, he would not have forgotten it for some weeks. Thus, first learn to distinguish a poisonous snake from one that is harmless.

Secondly, try to ascertain the best thing to be done in case you or your companion is bitten by a poisonous snake; and when you travel or even walk in a district where there is a chance of finding reptiles, be watchful, so that you do not tread unawares on a creature who in self-defence will inflict a death-wound.

When we consider that two or three drops of a fluid injected into the system of a full-grown healthy man is in most cases sufficient to stop the circulation of his

blood, the beating of his heart, and the action of his brain, it is indeed a reminder to us that our life hangs, as it were, by a thread ; and that, though our astonishment at such changes is rarely excited, yet it is a simple truth that life is a vast mystery, and that we are fearfully and wonderfully made.

**IN THE RAVINES OF CHUMIE.
WITH BABOONS.**



IN THE RAVINES OF CHUMIE. WITH BABOONS.

ANY person who has had the opportunity of observing closely the habits and private life of animals, must have often been astonished at the manner in which various creatures often combine either for their mutual protection or mutual benefit.

We have, fortunately, had many opportunities of watching the conduct of various creatures in their native homes, and the delight that any lover of nature experiences in thus contemplating the wise acts of the animal creation far exceeds the savage joy of the mere slaughterer or sportsman.

Hours and days have been happily passed whilst watching the skilful Golden Oriels weaving their retort-shaped nests among the pendant branches which overhung an African stream. Often have we enjoyed a

good laugh as we witnessed the futile attempts of an inexperienced grey monkey to grasp the nests of these birds and extract the eggs—attempts which almost always resulted in giving the adventurer a ducking. Whether we examine the skilled details of work shown in a beehive or ants' nest, the combined efforts of a pack of wild dogs to hunt down their prey, or the architectural skill of a village of beavers, we may invariably find traces of that same great Wisdom which holds a planet in its orbit, and makes the world a sphere.

A very curious case of a combination on the part of animals to rid themselves of a foe occurred near the Winterberg, a mountain to the north of the eastern frontier of the Cape of Good Hope.

In this locality there were several troops of baboons, young and old, which resided in the deep rocky ravines, and gambolled among the fearful precipices around. Very human were these creatures in their appearance and habits, especially when suddenly alarmed; the mammas were then seen to catch up their young ones, who clung round their parents' necks, and were thus carried rapidly to the summit of the rocks, where they would grimace and cough out their defiance at the intruder who had ventured into their domain.

An enemy, however, once found his way into their stronghold, and this was an enemy hungry, cunning, and powerful. It was a Cape leopard.

Crouching down among the long grass, or amidst the crevices of the rocks, the leopard would suddenly spring

upon a young baboon, and actually devour it before the eyes of its screeching parents. Strong as is a baboon, the leopard is yet far stronger, and with its terrible claws could soon tear to pieces the largest male baboon.

During some days the leopard feasted on baboons, but at length these creatures combined, and jointly attacked the leopard. They did not really mean to risk a pitched battle with him, for these creatures evidently knew and respected his great powers. They had, too, as the result proved, determined on a safer and more crafty method of proceeding.

The leopard, fearing the combined strength of his adversaries, left their neighbourhood, and retreated across country, but he was followed by nearly all the large baboons.

On went the leopard ; on followed the baboons. The day was hot, and the leopard disliked this perpetual tramping, and so tried to seek a retreat and lie down and rest. Then it was that the baboons closed round and worried him. Soon, too, he began to thirst, his tongue hanging out of his mouth, and the white foam covering his jaws.

Water was soon scented by the hunted brute, and to this it rapidly made its way ; but now the baboons became frantic ; they closed on to the leopard, some by their great activity actually tearing him with their sharp teeth, and the creature could not drink. The baboons could relieve one another, and some could eat and drink

too, whilst their companions continued worrying the leopard.

During two days and a night the country for several miles along the course of these creatures was startled by the cries of pursuer and pursued, and several farmers were witnesses from a distance of portions of the scene here described. They would not interfere, but watched the baboons' method of administering justice.

Worn out with exhaustion and thirst, the leopard at length could totter on no farther, and sank to the ground a prey to the baboons, who, in spite of his claws and teeth, which were yet formidable, attacked him with their whole force and soon tore him to pieces, they themselves escaping with only a few severe scratches.

Assembling their forces, the baboons returned rapidly to their stronghold, where they were welcomed by their females and young with choruses of loud and triumphant barks, which were continued during the greater part of the night, whilst for several days the excitement did not seem to calm down, but was shown by the unusual noises which proceeded from this curious colony.

Such an incident as the preceding may seem strange and unlikely to those who have not seen animals in entire freedom and left to their own instincts or reason, but our personal experience on many other occasions has taught us that it is not uncommon, and we do not therefore hesitate to record it in these pages. Another singular incident was related to us by a credible witness.

Amidst the deeply wooded ravines of a range of



BABOONS HARASSING A LEOPARD.

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mountains on the eastern frontier of the Cape of Good Hope, a large colony of the pig-faced baboons were located. These creatures had found there a safe resting-place for many generations : so steep and dangerous were the cliffs, that no creature except a baboon could dare wander among them, and so the animals were safe and happy.

The traveller in that wild region would find his arrival announced from hill-tops by a chorus of wild, weird-like coughs or barks, whilst these semi-human animals could be seen on the side of naturally formed walls, of a thousand feet deep, grimacing at and threatening the solitary traveller who had intruded into this domain ; a domain of which a king might well be proud.

This part of Africa has been gifted with a lovely climate, and with an air that is inhaled with effects similar to those produced by quaffing champagne. No wonder that the chameleon is found in this neighbourhood—a creature fabulously said to feed on air—but it has a glorious feast if it feed on the scented air of the Amatola mountains.

Here are steep, rocky precipices ; sheltered glens, each with bright flowery shrubs, whose purple and crimson blossoms give a distinct colouring to even the distant glens ; whilst a sea of mighty hills roll one after the other, far as the eye can reach, boundless and desolate, yet lovely as a Paradise. It is amidst these regions that the grey vulture floats like a thistle-down high up in the heavens ; where the eagle hisses through the air on his

prey, and where the baboon scampers at will, the legitimate and hereditary possessor of the soil.

Human-like almost in form, the baboon seems nearly human in his passions, as the following anecdote will show.

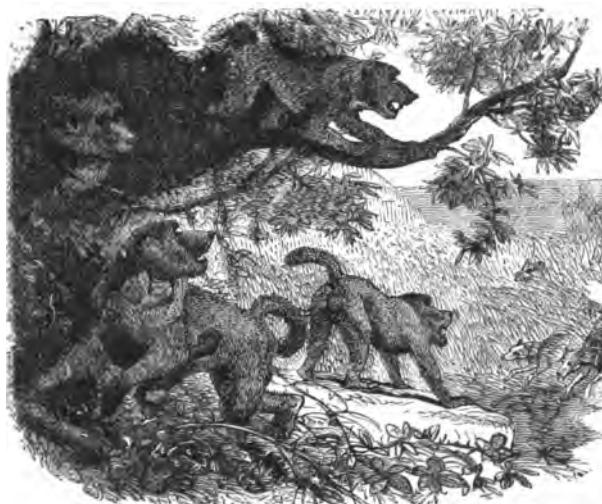
Some miles from the Amatola, and separated from them by an intervening plain, was another rocky stronghold, in which another colony of baboons were located. These latter, to the inexperienced eye, showed no distinct peculiarities from their neighbours in the Amatola, yet there were men whose keen perceptions were able to discover distinct peculiarities between the two races, and to be able to tell which was an Amatola baboon and which a denizen of the Chumie.

The baboons themselves did not fraternise, and if by chance stray baboons from each colony met one another in their wanderings, a regular fight ensued.

When the sun sank beneath the Chumie hills, the baboons from that region would sit on the most giddy precipices, and bark forth a defiance to the distant mountains. In that clear atmosphere sound travels a long distance, and is heard during a still evening at almost fabulous distances. Thus the barks and the coughs of the baboons at one district were heard and replied to by the creatures some miles off, in the Amatola.

To the uninitiated these mere animal barks seemed to mean nothing, but to the keen ears and comprehensive senses of the baboons they conveyed the direst insults and most defiant challenges.

Human nature has its limits of endurance, and so has baboon nature ; thus, after a particularly warm summer day, during which, probably, the creatures' blood became additionally heated, the evening challenges were given and answered with unusual vehemence. The moon rose bright and full, and the night was calm and lovely, and it



PIG-FACED BABOONS.

seemed strange that all nature should not be at peace ; but shortly after midnight the Chumie rocks and precipices resounded with screams, barks, and fiend-like sounds, as though a legion of demons had broken loose and were fighting among themselves.

For hours these fearful sounds were heard, and the few settlers then in that neighbourhood listened with astonishment, not knowing whether these noises indicated a coming storm of unusual force, or were the indicators of some convulsion of nature. Towards daybreak they gradually ceased, and the men whose rest had been disturbed armed themselves and cautiously approached the scene of the midnight tumult.

The cause of the alarming disturbance was then manifest. The baboons of the Amatola had long borne the challenges and insults of their neighbours of the Chumie; they had listened to their taunts, and had burned with a desire for vengeance. At length an attack was organized, and on the night in question the male baboons of the Amatola assaulted the colony of the Chumie, and a fearful fight ensued.

The baboon's method of attack is singular and formidable; his muscular power is enormous, whilst the crushing power of his jaws is inferior to that of many smaller animals: when once he grips with his jaws, however, he can hold on, and so he combines his powers, by seizing his antagonist with his teeth, grasping him at the same time with his powerful arms, and then pushing him from him, so that he tears out the piece which he has in his mouth. By this means we have seen a large dog so maimed in a few seconds by a baboon, that the former was obliged to be shot, as there was no hope of its recovery.

The result of the night attack which we have described was, that nearly one hundred baboons were found dead

or dying by the hunters who visited the scene of action ; whilst it was remarked that the coughs and barks which had previously disturbed the evenings almost entirely ceased, as though each party had gained a certain amount of respect for the other, by the experience gained during the midnight battle.

In England we may often see a combination formed by small birds, who chase a hawk or kestrel which has invaded their domain : the result usually is that the bird of prey retreats, though it be powerful enough to crush with its talons any one of its pursuers.

Hence we see the practical result of a combination against a foe, or a difficulty, when we note the habits of the animal kingdom, and thus we may learn how much may be accomplished by ourselves when we combine hearts and hands for the general good : families united for one purpose, men working as brothers with one aim, and a nation combined for a nation's good. Whilst unity gives strength and power, and defies a foe, the house divided against itself shall fall.

IN THE FORESTS OF THE GABOON.
WITH THE GORILLA.



IN THE FORESTS OF THE GABOON. WITH THE GORILLA.

PART I.

IN the sixth century before Christ, or possibly somewhat later, Hanno, a Carthaginian navigator, was sent out by the Government of Carthage to circumnavigate Africa.

Pliny tells us that the explorer was to follow the coast-line of the continent till he reached the Arabian Gulf; and Hanno himself says that it had been decreed that he should undertake a voyage beyond the Pillars of Hercules, and found Lybo-Phœnician cities; and that he accordingly sailed with sixty ships of fifty oars each, and a body of men and women to the number of thirty thousand, with provisions and other necessaries.

Africa was not circumnavigated that time, for provi-

sions became scarce, and the unwieldy party returned to Carthage.

But one day, as they were sailing along the coast, they came to a deep bay or inlet. In the bay was an island, and on the island a lake, and in this lake there was another island "full of wild men and women." They had hairy bodies, and the interpreters called them *gorillas*. Hanno continues—

"Pursuing them we were not able to take the men; they all escaped from us by their great agility, being *cremnobates* (that is to say, climbing precipitous rocks and trees), and defending themselves by throwing stones at us. We took three women, who bit and tore those who caught them, and were unwilling to follow. We were obliged, therefore, to kill them, and we took their skins off, and carried them to Carthage."

Pliny says that these skins were hung in the Temple of Juno, and the name *gorillas* changed to *gorgones*.

And now, some twenty-five centuries later, we sit down to read a book about the gorilla, his nature and habits and appearance. Of course we cannot be certain that the wild hairy men old Hanno found on the African coast are identical with the gorilla as described by Du Chaillu in his "Equatorial Africa." Most probably they are not, for the gorilla requires such an enormous quantity of vegetable food that Du Chaillu believes they could not be found in any considerable number on a small island.

But the name was given in 1847, when a skull and

part of a skeleton were discovered by Dr. Wilson, a missionary on the Gaboon, West Africa, and sent by him to Dr. Savage and Professor Wyman of Boston.

The apes known before that time were the chimpanzee of Western Africa, the orang-outang of Borneo, and the pongo of Batavia; but there had been vague rumours of the existence in Africa of another and larger species of man-like ape.

Travellers told the most wonderful stories about it, and the superstitious fears and exaggerations of the natives magnified it into something superhuman. In the forests of equatorial Africa it was said to reign supreme, driving away lions, elephants, and all other beasts of prey. It was supposed to lurk in trees by the roadside, and drag up unsuspecting negroes passing by, and choke them in its cruel grasp; to carry off women from the native villages, and to build a house in imitation of the natives, and then retire to sleep outside on the roof of it.

These are fables; but the fact remains that a monster haunts the woods of equatorial Africa, most malign in its nature, horrible in appearance, and ferocious and deadly in its mode of attack.

Among other objects, it was in order to hunt this beast, and penetrate to its haunts, and to study its structure, habits, and mode of life, that M. Paul B. Du Chaillu left America for the west coast of Africa, in the year 1855. He had, previous to this, resided for several years on the coast, where his father had a factory, and

had thus obtained a knowledge of the language and habits of the coast tribes. Du Chaillu says—

“ Looking once more to our guns, we started off. I confess that I never was more excited in my life. For years I had heard of the terrible roar of the gorilla, of its vast strength, its fierce courage, if, unhappily, only wounded by a shot. I knew that we were about to pit ourselves against an animal which even the leopard of these mountains fears, and which, perhaps, has driven the lion out of this territory ; for the king of beasts, so numerous elsewhere in Africa, is never met in the land of the gorilla.

“ We descended a hill, crossed a stream on a fallen log, and presently approached some huge boulders of granite. Alongside of this granite block lay an immense dead tree, and about this we saw many evidences of the very recent presence of the gorillas.

“ Our approach was very cautious. We were divided into two parties. Makinda led one, and I the other. We were to surround the granite block, behind which Makinda supposed the gorillas to be hiding. Guns cocked and in hand, we advanced through the dense wood, which cast a gloom, even in mid-day, over the whole scene. I looked at my men, and saw plainly that they were in even greater excitement than myself.

“ Slowly we pressed on through the dense brush, fearing almost to breathe, lest we should alarm the beasts. Makinda was to go to the right of the rock, while I took the left. Unfortunately, he circled it at too great a



MALE AND FEMALE GORILLA.



distance. The watchful animals saw him. Suddenly I was startled by a strange, discordant, half-human, devilish cry, and beheld four young gorillas running toward the deep forest.

“We fired, but hit nothing. Then we rushed on in pursuit; but they knew the woods better than we. Once I caught a glimpse of one of the animals again; but an intervening tree spoiled my mark, and I did not fire. We ran till we were exhausted, but in vain. The alert beasts made good their escape.

“I protest I felt almost like a murderer when I saw the gorillas this first time. As they ran—on their hind legs—they looked fearfully like hairy men; their heads down, their bodies inclined forward, their whole appearance like men rushing for their lives. Take with this their awful cry, which, fierce and animal as it is, has yet something human in its discordance, and you will cease to wonder that the natives here have the wildest superstitions about these ‘wild men of the woods.’ ”

And so the hunters returned to their camp; and then sitting round the large fires, which seem as great a necessity in the equatorial swamps and forests as among the Arctic snows, the native men and women told stories of the gorilla, and Du Chaillu listened unnoticed.

They told how two Mobondemo women were walking together through the woods, when an immense gorilla stepped into the path, snatched up one, and carried her off in spite of struggles and resistance. After many days, however, she escaped and returned home.

"Yes," said one of the men, "that was a gorilla inhabited by a spirit."

And then there is a grunt of approbation from the whole party; for the negroes believe that there is a kind of gorilla which is the residence of certain spirits of departed negroes. These, they believe, can never be caught or killed, and they have much more shrewdness and sense than the common animal.

A man had disappeared from his village; and the negroes related how, as he walked through the woods one day, he was suddenly changed into a hideous, large gorilla, and how he afterwards continued to haunt the village. And then several mentioned the names of men who were dead, and whose spirits were known to be dwelling in gorillas.

And so we can fancy the fire burning low, and the frightened negroes looking from one to another.

"I remember," said one at last, "my father told me he once went out to the forest; when just in his path he met a great gorilla. My father had his spear in his hand; when the gorilla saw the spear, he began to roar. Then my father was terrified, and dropped his spear. When the gorilla saw that my father dropped his spear he was pleased. He looked at him, then left him and went into the thick forest. Then my father was glad, and went on his way."

Here all shouted together, "Yes, so we must do when we meet the gorilla—drop the spear. That appeases him."

Then another man says, "If we kill a gorilla tomorrow, I should like to have a piece of the brain for my fetich. Nothing makes a man so brave as to have a fetich of gorilla's brain. This gives a man a strong heart."

Chorus (of those who remained awake): "Yes, this gives a man a strong heart!"

And then, gradually, they drop off asleep.

The next attempt that Du Chaillu made to find the gorilla was more successful. He and his hunters had started early, and pushed for the most dense and impenetrable part of the forest, so as to track the gorilla to its home.

Suddenly one of the natives gives a little *cluck* with his tongue, to show that something is stirring, and a sharp look-out must be kept. And then there is a noise, as of some one breaking down branches or twigs of trees; the men look eager and satisfied, for they know that it is the gorilla tearing down the berries and fruits he lives on. They examine their guns to see if, by any chance, the powder has fallen out; and Du Chaillu examines his, for it is an affair of life or death, and then they cautiously advance towards the spot whence the sound of crashing branches seems to come.

"Suddenly," says Du Chaillu, "as we were yet creeping along, in a silence which made a heavy breath seem loud and distinct, the woods were at once filled with the tremendous barking roar of the gorilla.

"Then the underbrush swayed rapidly just ahead,

and presently before us stood an immense male gorilla. He had gone through the jungle on his all-fours ; but when he saw our party he erected himself, and looked us boldly in the face. He stood about a dozen yards from us, and was a sight I think I shall never forget. Nearly six feet high (he proved four inches shorter), with immense body, huge chest, and great muscular arms, with fiercely glaring, large, deep, grey eyes, and a hellish expression of face, which seemed to me like some nightmare vision : thus stood before us this king of the African forest.

“ He was not afraid of us. He stood there, and beat his breast with his huge fists till it resounded like an immense bass-drum, which is their mode of offering defiance ; meantime giving vent to roar after roar.

“ The roar of the gorilla is the most singular and awful noise heard in these African woods. It begins with a sharp *bark*, like an angry dog, then glides into a deep bass *roll*, which literally and closely resembles the roll of distant thunder along the sky, for which I have sometimes been tempted to take it when I did not see the animal. So deep is it that it seems to proceed less from the mouth and throat than from the deep chest and vast paunch.

“ His eyes began to flash fiercer fire as we stood motionless on the defensive, and the crest of short hair which stands on his forehead began to twitch rapidly up and down, while his powerful fangs were shown as he again sent forth a thunderous roar. And now, truly,

he reminded me of nothing but some hellish dream-creature ; a being of that hideous order, half man, half beast, which we find pictured by old artists in some representations of the infernal regions. He advanced a few steps, then stopped to utter that hideous roar again ; advanced again, and finally stopped when at a distance of about six yards from us. And here, just as he began another of his roars, beating his breast in rage, we fired and killed him.

“ With a groan, which had something terribly human in it, and yet was full of brutishness, he fell forward on his face. The body shook convulsively for a few minutes, the limbs moved about in a struggling way, and then all was quiet ; death had done its work, and I had leisure to examine the huge body.”

After reading this, one cannot wonder that the author says, “ I never kill a gorilla without having a sickening realisation of the horrid human likeness of the beast.”



IN THE FORESTS OF THE GABOON.

WITH THE GORILLA.

PART II.

THE gorilla's mode of attack seems to be always the same.

He advances out of the wood straight towards the hunter, with fierce, gloomy eyes glaring; his wrinkled face contorted with rage, and uttering a roar which seems to shake the woods. From time to time he stops, often sitting down to roar, for his short, slender legs are not able firmly to sustain so vast a body; then looking his enemy in the eyes, and beating his breast with his gigantic arms, he advances again. The natives allow him to come quite close before they fire.

"Don't fire too soon," said one of them. "If you do not kill him, he will kill you."

And this Du Chaillu found unfortunately to be the

case; for one day one of his brave fellows went off alone in a direction where he thought he should find a gorilla.

When he was in a very gloomy part of the wood, he suddenly met a huge male face to face. It did not attempt to escape, and he, taking good aim, fired when it was about eight yards off. But perhaps the darkness made him miss, for the ball merely wounded it in the side; then it began beating its breast, and with the greatest rage advanced upon him.

To run away was impossible; he would have been overtaken immediately; so he stood his ground and re-loaded his gun as quickly as possible. But our author says, "Just as he raised it to fire, the gorilla dashed it out of his hands, the gun going off in the fall; and then in an instant, and with a terrible roar, the animal gave him a tremendous blow with its immense open paw, frightfully lacerating the abdomen, and with this single blow laying bare part of the intestines.

"As he sank, bleeding, to the ground, the monster seized the gun, and the poor hunter thought he would have his brains dashed out with it. But the gorilla seemed to have looked upon this also as an enemy, and in his rage almost flattened the barrel between his strong jaws."

After this the monster went off into the woods, and Du Chaillu and a native, coming up, found the mutilated and dying hunter. He was able to tell the whole story of the attack; and the negroes, when they heard it,

declared that this was no true gorilla that had attacked him, but a man, a wicked man, turned into a gorilla.

The female gorilla is seldom known to attack ; it is generally feeding near the male, and almost always gives the alarm by running off with loud and sudden shrieks.

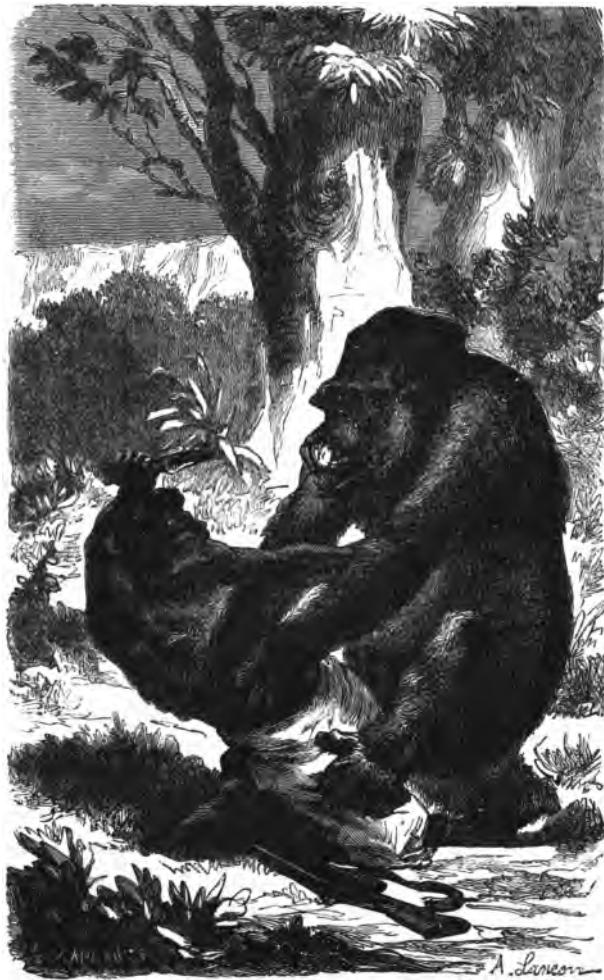
But the negroes assert that a mother with a young one in charge will sometimes attack.

Du Chaillu says that the mother with a baby gorilla sporting about is such a pretty sight, that often—eager as he was to obtain specimens—he had not the heart to shoot. And when the mother runs from the hunter, the young one grasps her about her neck, and hangs beneath her breasts with its little legs about her body.

There are many accounts of young gorillas captured alive after the mother has been killed. The poor little creatures make off into the woods at first, but invariably return to the dead mother, fondle her, and seem really to feel grief.

Even at two years old it takes three or four men to secure a gorilla alive, and then it needs to be bound with cords and sticks, and will bite and scratch every one near.

There is an account of "Little Joe," a morose, ill-tempered little beast of under three years old, who was taken alive by the hunters, and brought in triumph to our author. But the little monster was not to be tamed by any treatment, kind or harsh, and, like all the other young ones obtained, he died without any previous sickness, and "without other ascertainable cause than



A GORILLA'S ATTACK.



the restless chafing of a spirit which could not suffer captivity nor the presence of man."

The gorilla is an unsociable beast ; it is never found in herds. One male and one female wander about together ; though sometimes the male, like the rogue elephant, is found alone. He is then more than usually morose and dangerous. The young gorillas are found in companies of four or five, but never more.

Gorillas are restless wanderers, and are seldom found two days in the same neighbourhood. This is partly because they are such enormous eaters that it would be difficult for them to find an adequate supply of their favourite food—berries, pineapple leaves, sugar-canies, etc.—in a limited space.

At night the female and young gorillas climb the trees, and sleep there for protection against wild beasts ; but the male passes the night seated with his back against a tree trunk, and there is generally a patch on which the hair is worn thin from this position.

And now we will go to the rooms of the Geographical Society, in Whitehall Place, and look at Du Chaillu's specimens there exhibited.

Gorillas stuffed, looking very like Laps and Fins clothed in black hairy skins ; empty skins of gorillas, like dried-up frogs ; and great slouching skeletons hanging from the walls. It is a comfort to notice that although the skeleton and its separate bones, especially the skull of the young gorilla, are frightfully human, yet the gorilla looks a very great beast indeed, and very little of a man.

The comparative anatomists have not yet agreed what position the gorilla is to hold—whether first or second after man. Dr. Jeffries Wyman of Boston, and Professors Duvernoy and St. Hilaire of Paris, place it second—giving to the chimpanzee the highest position. But our own Professor Owen thinks the gorilla nearer akin to man than any of the other apes. Certainly the nasal bones project, and it has something which might pass for a nose—a feature not possessed by the chimpanzee.

The bony framework of the gorilla has, as we said, a very close resemblance to the skeleton of man.

There are the same number of vertebræ in the spine; the same number of ribs; except that while man has always twelve and sometimes thirteen pairs of ribs, the gorilla seems always to have thirteen pairs; and they are larger, longer, and stronger, for the beast is of vast bulk. The bones of the fore and hind limbs match bone for bone; but the fore limbs or arms of the gorilla are so long that his finger-tips reach below his knees, whilst the legs are much shorter than those of man.

The size and strength of all the bones far exceed that of the bones of man.

In the skull of all apes we find the same number of teeth, and the same kinds of teeth, as in man, namely incisors, canine, and molars. But in the gorilla, especially the male, the canines are much larger.

The object of this is at first not evident, as the gorilla, although able to attack and destroy the strongest animal, seems never to eat flesh; and it attacks with the arms,

and not the teeth, striking like a prize-fighter, but with enormously more strength than either Heenan or Sayers. But M. Du Chaillu found, on examining a wood where gorillas had been moving and feeding, that they use the canine teeth, and even wear them down in biting into the heart of trees to eat out the pith, and biting into trees which they could not otherwise break and pull down with their strong arms.

The skull of the baby gorilla is very like that of the negro baby; but the skull of an adult is even farther from man than that of the chimpanzee. The change is less, however, in the female than the male. In the male it is a complete metamorphosis, or would be, except that through the skulls of gorillas of all ages exhibited by M. Du Chaillu the change may be traced.

The little round human head becomes long and narrow, the muzzle projects more and more, the frontal ridge or bony ridge over the eyes is enormously developed, and a bony crest rises from the forehead, passing over the top of the head to the back part or occiput. These ridges no doubt strengthen the skull, and also serve as points of attachment for the powerful muscles which move the great jaws.

The male gorilla has a small amount of brain, and the cerebellum, or back brain, preponderates enormously over the brain proper, which must be the case with its enormous muscular development.

The average capacity of the gorilla skull is about 29 cubic inches, whilst the average capacity of the adult

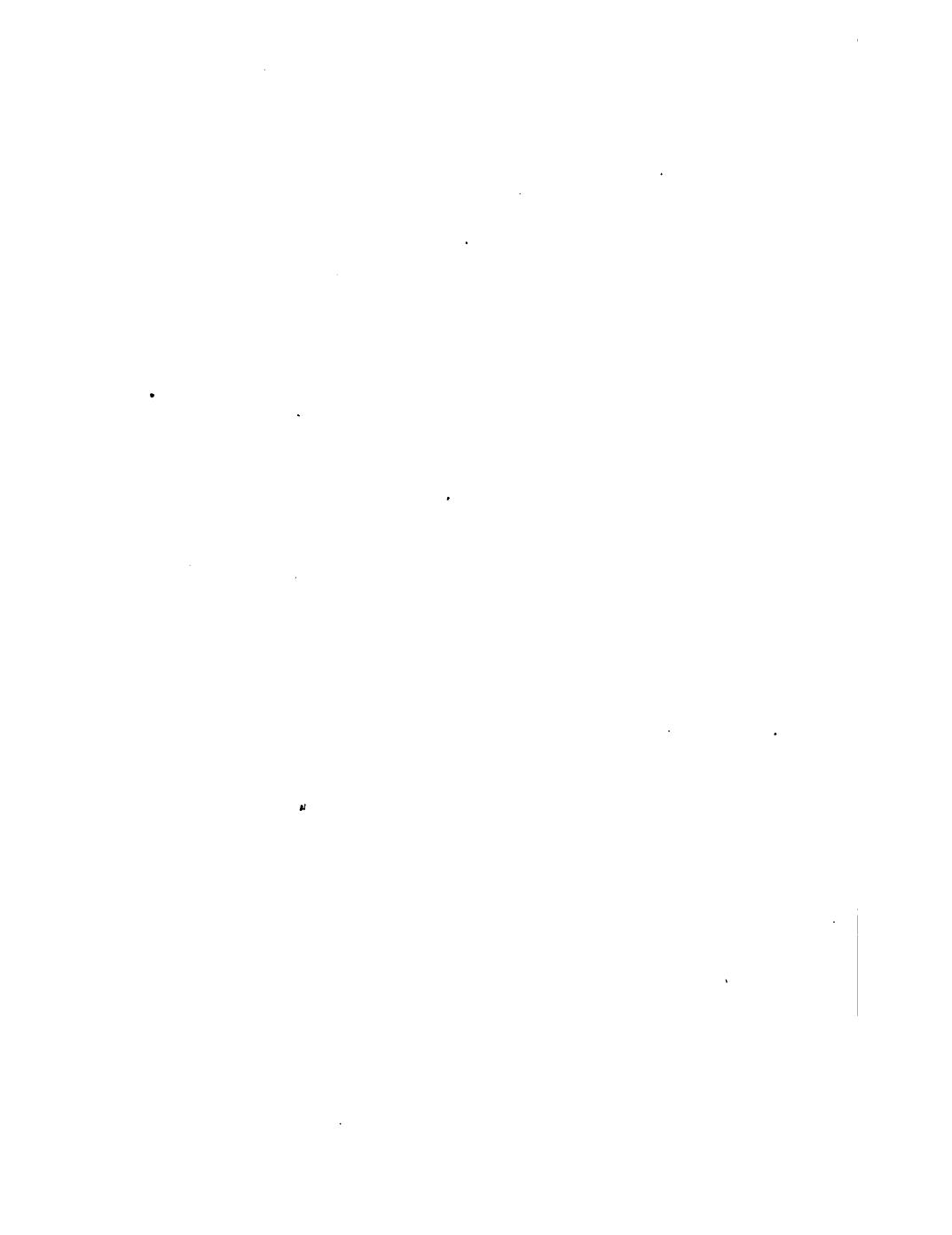
Caucasian skull is 92 cubic inches, or more than three times greater, whilst the maximum is 114 cubic inches. And whilst, so far as we yet know, the *maximum* of cranial capacity in the gorilla is 84½ cubic inches, the *minimum* of the human skull is 68 cubic inches. Thus between the *lowest* and most degraded of the human race, namely, natives of Australia, and the *highest* of the monkeys we have a difference in cranial capacity of 28½ cubic inches.

But this difference in the size of the brain is not so important as the difference in position and quality, and in both these respects there is a great gulf fixed between men and gorillas. In the lowest idiots the brain preserves the material and zoological characters of man, and it is the brain of a human being which neither disease nor degradation can change to that of an ape.

Still the gorillas are not comfortable, and we are not sorry to turn away from the three stuffed specimens, one male and two females, in the corner of the room in Whitehall Place,—a great hulking leathery-skinned male, with palms of the hands, breast, and face bare of hair, whilst body and limbs seem to be clothed in a black shaggy coat; the right arm is raised in a threatening attitude, and with a shudder one recalls the blow that laid bare the viscera of the poor native hunter.

One female is a horrid little baggy old creature with very short legs, but otherwise much like the male; and another is crouching on all-fours, and looks as if she were picking up something, and would stand up immediately.

It is to be hoped that the gorilla will, before long, be classed among the species that have become extinct; for although we very emphatically deny that he is "a man and a brother," it would be pleasant to have his claims upon us removed as far as possible.



IN A RUSSIAN FOREST.

WITH THE WOLF.





IN A RUSSIAN FOREST.

WITH THE WOLF.

IT is a pleasant place in summer, the village of Bogorodskoë—to those, at least, who are not above plain living, for neither hotel nor refreshment-room has ever been heard of there.

The whole place is simply one of those quaint little clusters of rough-hewn log-huts, clinging like limpets to either side of the high road, which are nowhere seen to such perfection as in Sweden or Russia.

Some few of the houses are of a grander sort—actually two stories high, with brightly painted roofs and white-washed balconies in front, that make them look as if they had white ties on.

These are the “swell” mansions of the place, and look down upon the poor little shanties around them as a footman looks at a beggar; but, for the most part, our village is made up of little cabins of the regular Russian

type, built with no tool but a short axe—one-storied, thatched with straw, containing two or at most three rooms, and topped by the cocked-hat-shaped “Tckerdak” or garret, in which the Russian peasant stows his hay, piles his wood, stores his provisions, dries his clean linen (when he has any), and, in a word, bestows everything that he cannot cram into the little kennel below stairs, where he, his wife, his children, and very often likewise his ox and his ass, his pig and his poultry, and everything that is his, eat, drink, sleep, and vegetate.

The beams of Mr. Ivan’s house fit into each other at the ends like the corners of a slate-frame, his door is fastened by strong wooden pegs, beside his big stove hangs the rudely daubed picture of some Russian saint, with a candle burning in front of it, and in the corner of the room stands a huge “soondook” or wooden chest, painted red, and clamped with iron bands. This chest is the peasant’s greatest pride; he keeps his Sunday clothes in it; he and his friends sit upon it like a sofa; and whenever he changes from place to place, he always drags this great heavy sentry-box of a thing along with him.

But I doubt whether any of you would like to live in a Russian cottage.

The roof is just a mixture of saplings and spiders; the walls a mish-mash of wood, earth, and earwigs;* the floor a paste of straw and clay, dotted with black beetles like the plums in a Christmas pudding!

* The Russian word for an earwig is “Prusak,” or Prussian—a curious instance of national animosity.

The hut I lived in had only just been built, so that I had nothing to disturb me worse than a regiment of black ants marching every now and then out of the cracks in my window-sill, or a swarm of mosquitoes coming "ping-pinging" through my open window.

And, what's more, I had a little round table fixed in the ground in front of my cottage, and a low bench put



THE VILLAGE.

beside it, and there I used to have my breakfast and tea in the open air; and I can tell you that when I was sitting there about seven o'clock on a glorious summer morning, fresh from my early walk, with my cosy little tea-urn steaming in front of me, a fresh roll on one side and a couple of new-laid eggs on the other, and the soft,

dreamy, sunny uplands stretching before me for miles, edged here and there with dark patches of forest, like fur trimmings upon a velvet robe, I was as happy as could be.

One may be comfortable in Russia as well as anywhere else ; and when you come to travel there, you soon find out that it's not the cold dark prison, full of spies, wolves, and frost-bites, that we used to imagine it ; that there are other things to eat there beside soap and candles, and other things to do beside sitting all day close to a stove with a woollen comforter round your neck.

While the heat of the day lasts you don't see much of our villagers. Here and there you may fall in with a stray one creeping along the highway, or straggling about the fields ; but, as a rule, the bulk of the population don't show up till towards evening. Then, as if by magic, the whole place suddenly becomes alive with all kinds of queer figures : bearded labourers in greasy red shirts, with baggy trousers stuffed into their high boots ; shouting children, shaggy as bears, and brown as hazel-nuts, with nothing on but a pancake-coloured nightgown well lined with dirt ; short-skirted women, with scarlet handkerchiefs round their heads, and round, flat, wide-mouthed faces, that look like a penny with a hole through it ; sallow students with straggling black hair, and an *earthy*, unwashed look about them, ogling the brown-cheeked, barefooted lasses who come tripping by with their pails of spring water ; and spruce village policemen, dotted with brass buttons, looking on with an air of fatherly superiority.

But it is beside the rickety pump in front of the village "shop of all sorts" that the great assembly is held. There fathers discuss things in general, with their mouths full of black bread and salted cucumber; there mothers compare notes on family matters, or drive hard bargains among themselves; and there children of every age amuse themselves with the national sports of rolling in the gutter and throwing dirt in each other's eyes, varied by an occasional bout at knuckle-bones, by way of variety.

But in winter a sad change comes over merry Bogorodskoë.

Instead of the charming little village, full of life and enjoyment, you see nothing but a cluster of silent huts, half buried in snow, peering above the great white desert that extends on every side.

All around, the bare, desolate fields stretch their ghostly wastes to the horizon, while here and there a solitary raven, disturbed by your approach, flaps heavily away with a dismal scream, like some belated spectre returning to its grave.

The few peasants who still linger about, muffled in their thick sheepskin frocks, survey you with an air of disdainful astonishment, as if wondering what business you have here at all; the leafless trees stand up gaunt and grim against the cold, grey sky, like an army of skeletons; and over all broods a dead, dreary, ghostly silence, broken only by the distant barking of a dog, or the moan of the wind through the distant forest.

And worse still, if you happen to stroll beyond the village after dark, you will see pale spots of light, like the flame of a half-quenched coal, flitting among the trees—and hear a long, melancholy howl, like the wail of the wind on a gusty winter night, going drearily up through



WOLVES IN WINTER.

the still, frosty air—and suddenly find yourself face to face with a huge, gaunt, grey wolf, as savage and blood-thirsty as hunger can make him.

Well, it was on a bitter January evening, the winter

before last, that six men were assembled in one of the huts which I have described.

It was a room of the common sort, a big bed, with a patchwork coverlet, filling up one side, the usual huge chest in one corner, a picture of the emperor on one wall, a picture of the bombardment of Sevastopol on the other,* and a portrait of a saint as usual beside the stove, several clumsy wooden chairs, and a low table, on which stood a "samovar," or Russian tea-urn with a teapot perched on the top of it, while around it stood half-a-dozen tumblers, full or empty; for in Russia, you know, it's the way to drink out of tumblers instead of cups,—a fashion which burns one's fingers shockingly, if it does nothing else. Beside the tea-urn stood a small lamp (gurgling and sputtering as if it had a bad cold), which threw a pale circle of light upon the heavy crossbeams of the roof, and the dark sallow, bearded faces of the company.

They make a very striking group under the dim lamp-light, these six men, and all the more so from the strange manner in which they were behaving.

In an ordinary party of Russian peasants you would have heard ceaseless talking and laughing, boisterous jokes, stories of Neighbour This and Neighbour That, snatches of old songs sung in this very place by the same kind of men in the days of Peter the Great, and

* The Russian peasantry are almost childishly fond of coloured prints. In the smallest and poorest huts you find painted daubs of Russian victories, or flaring unlikenesses of the members of the imperial family.

possibly, if the story-teller of the village happened to be of the party, an old legend or two, handed down from generation to generation since Russia first became a people; how Ilia Murometz fought with the Nightingale Brigand, and how Alexey Popovitch slew the Flying Tartar. But these men were silent and thoughtful; no jokes, no stories, no laughter, every face clouded with anxiety, every eye fixed moodily on the ground.

And what was it, then, which made them so gloomy?

Let us listen to their talk, and perhaps we may find out.

“It is a sore judgment on us!” said one who seemed to be the host—a big, burly man, with a tangled yellow beard. “The like has not been seen since the year '61, when the wolves came right into the village, and killed nine of our dogs in one night. But then there were many wolves, while now it is only one that does all the mischief; and yet we, as many as we are, can do nothing against him!”

“And how the mischief *can* we do anything,” cried a second, “against a brute that scurries about as if he had wings? Pounce he comes into the village, gobbles up the first thing that comes to hand, and off again! and you may try to recollect his name!” (This is the popular phrase for utter disappearance.)

“Well, we must do *something* to stop it,” said a third, a grim old fellow, who had had his nose taken off by a frost-bite. “Mother Avdotia's only cow killed last week, poor Iván Masloff torn to bits on Friday, Feodore

Nikeetin's dog snapped up last night, and our watchman's shoulder bitten through—brothers, we are wrong before God if we let this go on!"

"Ah, it is all very well to say that we must do something—but who's to do it?" returned the second speaker emphatically. "When we turn out, three or four together, the cunning rascal marks it, and keeps off; and there's not a man in the village, I take it, that would venture upon him single-handed. Who'll try it, think ye?"

"*I will!*"

It was a very low, quiet voice that spoke the last words; but there was a firmness in it which no one could mistake.

The speakers started, and looked up.

The sixth of the party, seated in the farther corner near the door, had hitherto been so quiet that they had almost forgotten his presence; but now every eye was turned upon him. He was a young man, but little over twenty, though his heavy moustache and square, thickset, muscular frame made him appear considerably older. His face was coarse and commonplace enough—the shallow, low-browed, weather-beaten countenance of the genuine Russian peasant; but there was a nameless *something* about the broad square jaw and small, deep-set grey eye that would have made you pick out that man among all the six for any work requiring courage and perseverance. And, in truth, Vladimir Kovroff, young as he was, had already performed more than one feat which

the village gossips still remembered with admiration in their winter-evening chat round the tea-urn.

“Ah, Vladimir *Mikhailovitch*!” (Walter the son of Michael) cried the host, “what’s this you’re thinking of? You, that have only been married two months, to go making wolf’s meat of yourself? Nonsense, lad! stay at home, and take care of your wife, and leave wolf-hunting to them that’s got nothing better to do!”

Kovroff answered never a word; but his features hardened like a mask of iron, as he slowly rose to his feet. All present knew well that when his face wore the look that was upon it now they might as well try to move a mountain as to persuade him; and they sat silent, waiting to hear what he would say.

“You say that *Nikeetin*, the butcher, lost a dog last night; did the wolf eat the whole carcass?” asked Vladimir of the noseless man, in the quick commanding tone of one who knows that he must be obeyed.

“No; he hardly got a bite of it, the rascal—that’s one comfort!” answered the old fellow with a grim chuckle. “*Feodore Stepánovitch* heard the dog yelp, and out rushed he and his men with lights and hatchets, and scared the brute away. As for the dog, it’s lying there in the yard now.”

“Go, one of you, and bring it; and if any one has a sharp wood-knife, let him give it me.”

It was curious to see how absolutely this man, the youngest and least important of the whole party, issued his orders; and how unhesitatingly the rest obeyed them.

Here, as everywhere, the stronger mind took the lead, and the weaker instinctively followed.

The host produced a huge, broad-bladed knife, which Kovroff slung round his neck without a word; and, a few minutes later, the carcass of Nikeetin's dog was lying beside the door.

Vladimir drained his glass and said—"You tell me this brute generally comes about midnight; so between eleven and twelve I shall take this carcass to the cross-roads, and throw it there as a bait for him, hiding myself behind the fence hard by. When he comes up, I shall attack him; and then let it be as God wills. But you, brothers, mind and don't say a word of this to any one, lest my Masha (Mary) should hear of it. If I get off, there's no need for her to know about the matter at all; and, if I'm killed, she'll hear of it soon enough—God help her! And now, Alexey Nikolaievitch, if you can spare me your bed for a while, I'll take a nap, to freshen me for my work."

And a few moments later, this nameless hero (himself all unconscious of doing anything heroic) was sleeping as calmly as if a deadly conflict, from which he had little or no chance of escaping, were not awaiting him four hours later on.

* * * * *

Midnight—cold, dreary, ghostly. A dead, grim silence over the lifeless village and lonely high road. A faint glimmer of moonlight, giving a weird, spectral look to the half-seen outlines of the dark, silent log-huts, and

making the gloomy depths of the encircling forest seem all the blacker. A shapeless mass lying out upon the hard snow of the cross-roads, and a dark figure crouched behind a fence hard by, with something in its hand which glitters as the moon falls upon it.

Weary, weary work, crouching there in the cold and darkness, with the stiffening fingers clutching the heavy hatchet, and the strained ears watchful to catch the slightest sound.

Hark! was not that a low howl from the far distance ?
No, it was but the wind moaning through the skeleton branches of the forest. Patience yet !

Hark, again ! and this time there is no mistaking the sound ; not the long melancholy howl wherewith a supperless wolf may be heard bemoaning himself, on the outskirts of Moscow, almost any night in the week, but a quick snarling cry, as of one who sees his food near at hand, and wishes to hasten its arrival.

There, gliding ghost-like over the great waste of snow, comes a long gaunt shadow, straight, swift, unswerving, towards yonder shapeless lump of carrion on the highway, upon which he pounces with a fierce worrying snarl that makes even the brave heart of the listener stand still for a moment with involuntary horror.

Now is Vladimir's time ! To rush out at once might scare the beast away ; he must first try to cripple it.

The axe flies at the monster's head with the force of a catapult ; but the dim light deceives his aim, and it hits the fore shoulder instead, tearing it open with a frightful

THE HIGHWAY AT NIGHT.





gash, from which the blood gushes freely over the snow.

With a sharp howl of pain, the wolf turns and flies ; but the swiftest foot in Bogorodsköe is hard at his heels. After his long, weary vigil, this breakneck chase is like the breath of life to Vladimir, and, over this hard smooth snow, his speed is a match for any wolf wounded like this one. Already he has almost come up with the game, and is raising his knife for a sure stroke, when the flying grey shadow in front of him suddenly wheels round, shoots up from the earth like a rocket, and falls right on the breast of its pursuer.

Down go man and wolf amid a whirl of flying snow, while a shrill yell rings out on the silent air, for even in the sudden shock of that death-grapple Vladimir's knife has found time to come home, and the hot blood pours over his face and breast from the wounded side of his adversary.

And so, far out on the lonely plain, with the cold moon looking pitilessly down upon it, begins the tug for life and death.

Over and over they roll in the bloody snow, the wolf clutching at the throat of the man, the man burying his knife in the side of the wolf. Crushed to the earth beneath a stifling weight—spent with his long watch and headlong run—with certain death glaring at him from the yellow, murderous eyes of the savage brute, the stubborn Russian still fights doggedly on.

In the hot fury of that mortal struggle, the fierce

hunter-nature awakes, sweeping away all memory of his comrades, his wife, his devotion, he feels only the longing to tear and kill tingling to his very finger-ends, only the grim enjoyment of plunging his knife again and again into that gaunt muscular side where the life seems to lie so deep.

See! those merciless stabs are at length beginning to tell; the fierce yellow eyes are growing dim, the huge jaws quiver convulsively, and from their edges the froth and blood drip in hot flakes upon Vladimir's face. But now, with a mighty effort, the wolf wrenches his head from the iron grasp of Vladimir's left arm, and with one fierce crunch of his strong teeth, breaks the bone below the elbow. The limb drops powerless at his side.

One more desperate stab into the quivering flesh of his enemy, and then he feels the savage teeth fastening upon his throat; everything swims around him, there is a rushing as of water in his ears, a thousand sparks dance before his eyes, and then all is blank.

* * * * *

“God be praised, brother, that you are still alive!” said a gruff voice in Vladimir's ear, as he recovered consciousness; while, at the same moment, a soft arm was thrown round his neck, and a fervent “Thank God!” murmured by a sweet voice that he knew well.

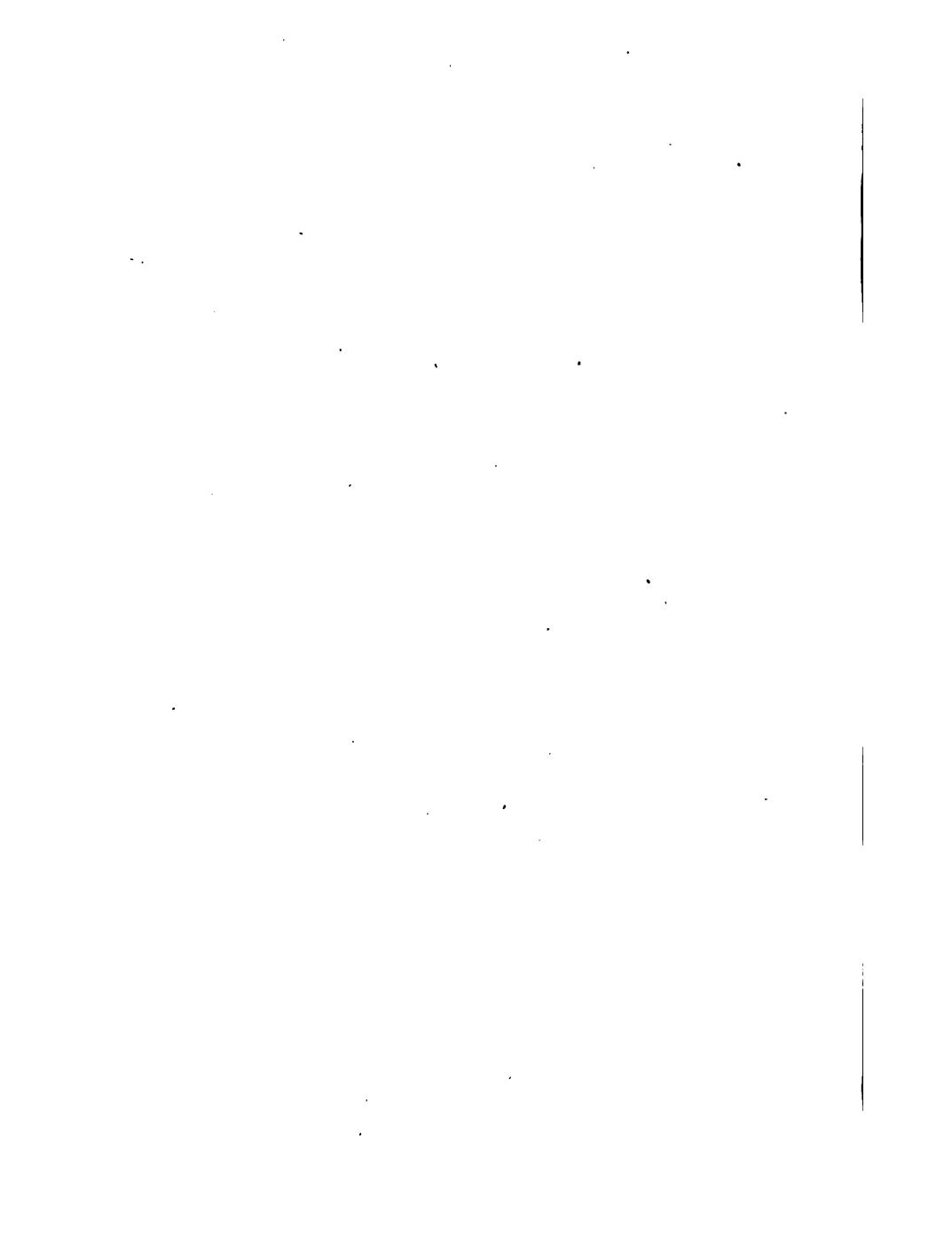
“Where am I?” asked Kovroff, looking vacantly round, and recognising first his wife and then his host of the evening before.

“Where are you?” repeated Alexey; “why, in my

hut, to be sure, where you've been ever since we brought you in last night. You know, when you went out, we followed at a distance: and as soon as we saw you start in chase of the wolf, we set off after you; but it's not everybody that can run like *you*, so we didn't catch you up till 'Uncle Greycoat' was beginning to get the best of it. Well, when we'd settled him with our hatchets, we carried you back here; and Sergei Antonovitch ran all the way to Sakolniki for the German* doctor, and he's been and tied up your arm, and says you're sure to recover if you only keep quiet.

And recover he did, sure enough; at least, when I met him at Bogorodsköe last summer, he was well enough to run a mile shoulder to shoulder with me, and break a thick sapling like a stick of sealing-wax. And after the race I went home to tea with him, and saw the wolf's head (its skin he had sold to a Russian officer) nailed up above the door of his hut. And the old man who had lent him the knife told me the whole story, just as I've given it you; and he told me too, that from that day forward the whole village called Vladimir nothing but "Mujeek Bogatler," or the Peasant Hero.

* In peasant parlance, every foreigner is a "German."



IN THE WOODS OF MAINE.

WITH WEASELS, ERMINES, AND MARTENS.





IN THE WOODS OF MAINE.

WITH WEASELS, ERMINES, AND MARTENS.

MY vocation was for many years that of a "trapper," and away from men, amongst weasels, ermines, minks, and pine martens, in the woods and glens of Maine, I have spent much of my time. These little creatures are not only valuable, but they are entertaining. Let me tell you a few things about their manners and customs.

Let us begin with the little brown weasel, which is the smallest and perhaps the most warlike of the class of animals to which it belongs.

Go out to where some noisy, fishy-smelling brook tumbles among great mossy stones, shaded by dense hemlocks, and you will very likely see one darting and peeping about. Don't be afraid of scaring him;

he won't run; he will stay about those stones as long as he pleases, in spite of you. You may do your best to knock him over; but it will only show you how easily he can dodge your blows.

Indeed you had better look out; the little fellow may get mad after a while; and if he does, he will begin to scold—a sharp, intense sound, quickly repeated. Then the more you strike at him the closer he will contrive to get to you, darting and daring up nearer and nearer, till, if you exasperate him too much, he may make a leap for your windpipe, quick as a wink.

Yet, after all, he is but a tiny little fellow. His body will be found to measure only about eight inches in length. His legs are short, his neck is long, the ears large and open, the eyes small but bright, and set in the head nearer the nose than the ears.

What is remarkable is, that whilst he bears the name of the brown weasel the year round, only in summer is the colour brown along the back, and then it is white under the limbs; but in winter it is all white—white over every part, excepting the tip of the tail, which is always black for half or three-fourths of an inch. In the spring, when changing from white to brown, or late in the fall, when again turning white, the colour of the weasel is often very prettily mottled; and a very apt way of showing these changes is to stuff three specimens—a white one, a brown, and a variegated.

The weasel's nest is made in piles of loose, dry stones, ricks of wood and chips. It prefers a heap of dry

rubbish, near streams, brought by freshets, and lodged against stumps or fallen trees.

It makes a very cosy little nest for its young, of which it sometimes produces as many as fifteen in a single



THE WEASEL.

season—three litters of five each. I never found less than four in a nest; generally there are five.

If you meddle with its young, you will find, and perhaps to your cost, that not even the bear or cougar ever defends its whelps with one-half the courage shown by this little creature. I have often been obliged to back hastily off to avoid a bite on the leg, or a smart

chance of being throttled. A person not acquainted with weasel grit would laugh at this. But, really, I had far rather take my chance in a fair fight with a bear than with three weasels, little as they are.

Some years ago, while fishing in company with a boy friend along the bank of a large brook, we accidentally stumbled on the burrows of several weasels. The first we saw of them, they were dodging and darting about us, making their low, scolding noise. There were four of them, but whether two pairs had their nests in the same place or not, I cannot state. We began to strike at them with our fish-poles, to drive them off; but the more we struck, the more they wouldn't go away; till, the conflict waxing hot, they would actually jump up three and four feet against our jackets in their attempts to get to our throats; and finally things came to such a pass, that we were obliged to run; and even then, for some considerable distance, the resolute little warriors chased us.

I remember a neighbour also telling me that, going along beside one of his "double walls" one morning, he happened to espy three weasels coming toward him on the wall (returning to their burrow from some nocturnal foray, probably). He knew their temper, and, thinking to have some fun, ran back to where the double wall narrowed into a "single wall," and as they came along tried to stop them with his goad-stick. He succeeded in keeping them back for a number of minutes. But ere long "they got so mad," as he said,

and came at him so hot, that he was glad to stand back and let them pass.

And I have heard the story of a little girl who, in going to school, had to cross a pasture. One night she failed to come home at the usual time, and, after waiting awhile, her mother started out to meet her. Half-way across the pasture she came upon her child—dead; gnawed and lacerated in the most shocking manner; while about her swarmed more than a score of weasels. Do you suppose they had observed the child passing day by day, and deliberately banded together to attack her?

But perhaps the little creatures were hard put to for food. They live principally upon mice—the red-backed mouse, the hamster mouse, and the common house mouse; also the brown rat. They will eat birds' eggs, and often rob the nests of those building in the highest trees. Not unfrequently they surprise the birds themselves. Unless pressed by hunger, they rarely eat the flesh of their victims, but content themselves with the blood, which they suck instantly upon killing, and the brain, which they gnaw through the skull to get.

The enemies of the weasel are chiefly the hawk and the owl—that stoop, and, clutching it in their talons, squeeze the life out of it without giving it the opportunity of using its sharp teeth. But given this opportunity, and hawk and owl alike will find that they have “caught a Tartar,” and however willing they may be to let him go, he has no willingness to let them go. He will tear

into his captor's vitals, and whilst flying, suck his blood and bring him to the ground.

Now and then a weasel is snapped up by some passing fox; Reynard lays all tribes under contribution. Occasionally, too, a raccoon may pick off one; which fact recalls to mind a little rencontre I once saw between a raccoon and a weasel.

It was a dark and cloudy day in September. A raccoon would scarcely be travelling on a bright day. I had gone out into the woods to shoot grey squirrels. and was standing at the root of a tall rock-maple, looking up into the top after one that was hiding there, when a great rustling of the fallen leaves and snapping of twigs caught my ear. It seemed to be in the under-growth which skirted the stream below, and, as I looked, a large raccoon burst out into sight, running almost directly toward me. As he run, he kept pouncing and grabbing at something which I soon perceived to be a weasel.

A great beech-stub was standing near. The weasel, dodging and doubling, made for the stub, and, coming to the root, whipped into a hole out of sight.

I cautiously raised my gun to secure the raccoon, which, wholly unconscious of my presence, was clawing at the hole; but ere I could raise the trigger the weasel popped its head out of another hole, three or four feet higher up, then dropped upon the nape of the raccoon's neck. I heard its sharp teeth grit as with a low snarl the raccoon darted back, snapping in vain at his wily

little adversary that bit at the roots of his skull. Their evolutions had placed the trunk of another tree between us. I stepped out, when the raccoon, catching sight of me, scuttled away among the bushes, the weasel still clinging to him.

I went to the stub, and, tearing away the punky wood at the butt, uncovered, as I expected, a nest of young weasels. But before I had fairly looked them over, a slight rustle from behind warned me to step aside. The brave little mother had returned, unscathed, to her tiny family, ready to do battle again in their defence.

Now and then a weasel will voluntarily leave the woods and come to the outstanding barns after the mice. Sometimes it will even enter the farm-house. It is a wonderful mouser; far more expert than a cat, it will rid a house of mice and rats in an incredibly short time—also of the chickens, ducklings, pet canary, &c. No chink or knot-hole seems too small for it to penetrate, and it will go up a smoothly plastered wall like a fly.

It used to be a common thing, when a farm-house was overrun with mice, to catch a weasel and turn him loose in the chambers. For the next day or two there would be a dreadful massacre of the vermin. Sometimes, where there were rats, it would be impossible to sleep, for their dying squeals.

But enough of the weasels. Let us speak of the ermine.

The ermine has its burrow high and dry under loose tumbled rocks, and sometimes in hollow tree-trunks. They

climb trees nimbly after squirrels and birds' nests. They frequently rob hawks' nests, and are, in fact, about the only enemy, save crows, the hawks have, and no crag or overleaning tree is inaccessible to them.



THE ERMIN AND HARE.

Passing in front of a precipice, I once saw a robbery of this sort. A noise up above my head first drew my attention. There were hawks swooping excitedly past a little shelf of the ledge, uttering short, angry, and helpless squawks. On looking more closely I saw their

nest on the shelf, and a small animal playing around it. It was within easy gunshot, and, on my firing, an ermine came tumbling down the rock.

But the hare is their easier and more common prey. They catch this timid little creature with no apparent exertion, by merely creeping up within a few yards of the spot where it is feeding, and then darting out upon it.

While at the Muculsea Mountain, we had made and set a bear-trap over among the "black growth" on the slope of the opposite mountain, which is known on the State maps as Mount Culcusso. The trap was of logs about nine feet square, laid up, log-house fashion, to the height of six or seven feet, and roofed over with heavy sticks, upon which we laid large stones. In one side there was set a door of split sticks, which played up and down in grooves on either side. When set, the door was raised, and the button which supported it connected with a pole, which extended back overhead to a baited spindle on the farther side. Bruin had only to go in and tug at the bait, when down would come the door, and lo ! a prisoner to be shot through the cracks next morning.

But it didn't always work ; sometimes the bear would spring it, and somehow get back far enough to get away from under the door, dragging out the bait. We used to visit it once in three days. On going over one morning I heard, as I went up through the woods, the short bark of a fox ; and, working up quietly, saw,

as I came out in sight of the trap, a very pretty crossed-grey fox picking at the hare with which the spindle was baited. Some creature had sprung it and dragged the spindle out; and this passing fox was improving the chance to get a meal gratis.

He had not yet seen me, and I wondered what had caused him to bark—since foxes rarely bark, unless frightened or vexed. But presently I saw an ermine steal out from behind the corner of the trap. Instantly the fox stopped gnawing, held his head perfectly still a moment, with retroverted eye, then, as the ermine crept a little nearer, sprang at him with another sharp *yap*. The ermine dodged back, and the fox returned to his repast.

But pretty soon, desirous of a share, the little peeping nose again came out in sight. This was more than his foxship could stand. He made a furious dash after the persistent little intruder, chasing him round the trap with a whole string of snappy barks. The ermine took refuge inside the trap, going in through a chink.

So far from being driven off, the fox had scarcely returned to the bait when I saw the restless little head, with its bead-like eyes, pop out beneath the door, within a foot of the bait. The fox snapped at him with bristled neck and a *swish* of his big brush. But the more he snapped, the more he had to. The ermine seemed resolutely bent on having at least a taste. I hoped to see a tussle between them, though the ermine could hardly have made much of a fight. But as, after waiting

awhile, this did not seem likely to come off, I shot the fox, and the ermine ran off.

During the winter months the fur of the ermine is white. It is then most valuable, and is much used in Europe for lining and trimming garments.

And now a word as to the mink.

A sly little fellow is the mink; but his slyness does not comprehend traps at all. So set your rat-trap down there on the log, bait it with trout, and, very likely, on going down a few mornings after, you will find the little chap hard and fast by the leg.

Perhaps you will find the trap sprung, and, on looking beneath the jaws, will see a little black foot—just a foot, and nothing else—where the resolute owner has gnawed off his leg to get away. If left in the trap overnight, he will be very likely to do this.

But this creature has a trick which is more remarkable still. Sometimes you will find him in the trap all right, but, on holding it up by the chain, you will see that the mink has no tail! Look round; you will find it near. The mink often bites off its tail when caught in a trap. Old hunters say that it does this to revenge itself on them by spoiling its skin. You will hardly believe that, of course. But I could not give any better reason if you were to ask me. It is something I never could explain. For this reason hunters rarely use steel traps for mink. What are known as "figure-four" traps, made of stakes and poles, which crush them down, and hold them fast across the back, are much more to their purpose.

The mink is almost black—sometimes white-throated. It is about two-thirds the size of an ordinary house-cat, but not so thickset. Its home is under banks, ricks of logs, or large, loose stones, generally near water—on the shores of ponds, rivers, and brooks. And so secret is it that I have never found its burrow, save in a single instance. This was under an overgrown bank of a small river. There were but two young ones—little wee creatures, seemingly but a few days old, and much lighter coloured than the old one. The old one took to the water, and kept darting about in great unrest, anxiously poking up its head beside stones here and there.

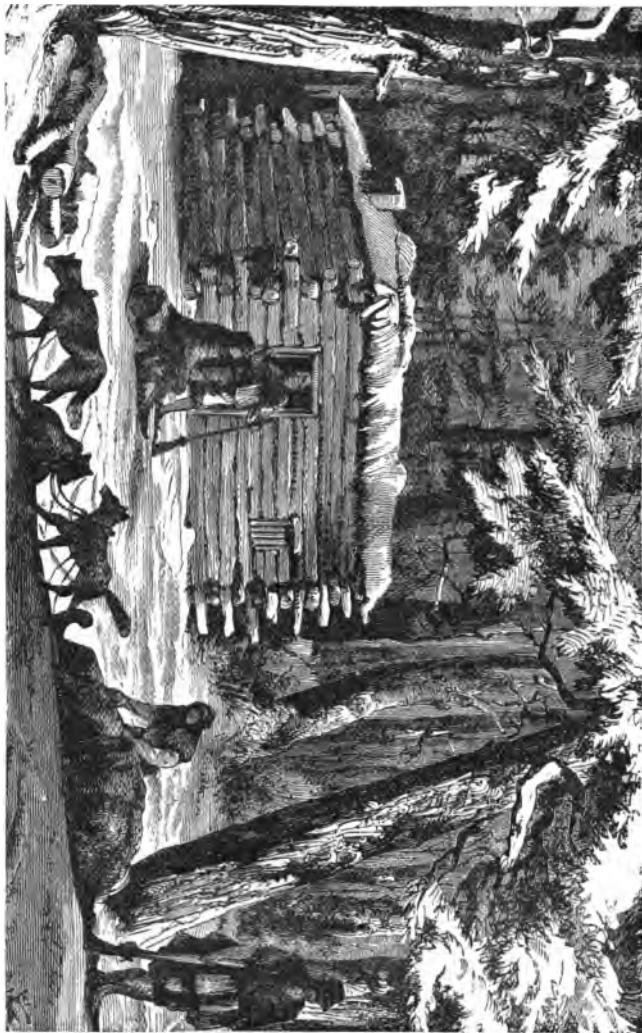
For five winters past the same mink has spent the season under a bank on a near brook. I often see its tracks on the snow, and occasionally get one swift glimpse of the black rogue. During the first winter I tried repeatedly to get a shot at him—his skin would probably bring six or seven dollars—but since that I have come to look upon him as a sort of neighbour, and merely wink my eye at him in passing.

Sometimes, after a light snow, I see where he has been out after squirrels and wood-mice. The bank under which he lives opens into a famous “trout-hole,” where the water is four or five feet deep, in which the brook-trout pass the winter. I can imagine the mink darting out upon them under the thick, snow-laden ice.

Lastly, let me speak of the pine marten.

Clad in its glossy coat, delicately slim, agile, and ever

WINTER QUARTERS OF THE "TAPDRAWS."





in wary motion, the pine marten is the most beautiful inhabitant of the forest.

It is about one-half larger than the mink, and greatly resembles a young fox, as it looks when about two months old. The colour is a yellowish brown, with scattering black hairs. These last are sometimes so abundant as to give the animal, at a little distance, a tinge of black.

Ah! well do I remember the first one I caught. It was years ago. I was no more than ten then—ten or eleven. It was my first attempt at trapping on my own hook. I had put down seven or eight mink-traps on a neighbouring brook; stake and pole traps save one—a fox-trap, which I set among a clump of hemlocks on a knoll near the brook. And, on making my very first round, I found a marten in the fox-trap, caught by one fore foot. It crouched still as a shadow, watching my every movement. No capturer of olden cities ever felt greater elation. I knew what it was, and stood for a long time admiring and gloating over its beauty.

But to possess its skin I must kill it. Oh, how I hated to strike it! It was so pretty! Its lithe form, its delicately shaped head, and its graceful neck, all appealed to my mercy. And, more than that, it seemed to eye me with such knowing glances, as if it knew my intent.

It was more than an hour before I could get my heart hard enough to strike it. And I am not ashamed now to confess—what I was *then* very much ashamed of—that the tears would come at the seeming stern necessity.

My soft-heartedness worried me considerably all that fall. Whenever I had game to kill, I recollect that I used to shut my eyes when I struck—a practice by no means consistent with mercy, for by so doing I frequently struck wild, and had to deal twice as many blows.

Quite late that fall, while going through the woods on my way down to the village with my *furs*, I shot another. Foxes were very plentiful that season. I had taken the gun in case I should chance to see one, or, indeed, any other game; for at that time bears used frequently to cross the trail leading out to the road.

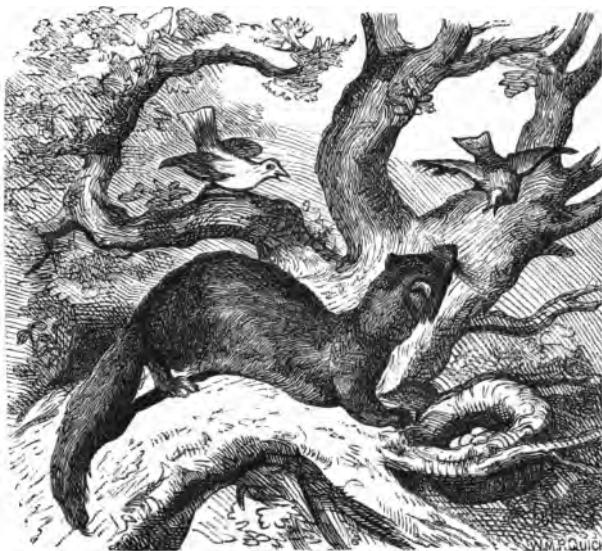
I had come out into a partial opening, made by felling the largest of the pines, when a sudden snapping and scrambling in the old brush to the left caught my ear. Turning, I saw a marten jump from the ground against the standing trunk of a pine, up which it ran to a knot that projected a few feet.

Unlike the mink, martens are great climbers. Squirrels are their common prey. They pursue them to the very tops of the trees, and out to the tips of the boughs. The swaying and rustling occasioned by one of these chases will often direct the hunter, and, if he approach with caution, he may very likely see the marten devouring its prey on a limb, at its juncture with the trunk.

But it is very difficult to shoot a marten in a tree when once it has seen the hunter. Quick as thought it will whip round the trunk, and so keep the tree between them, with just the tip of its nose in sight. On two

occasions I have seen the lynx chase the marten up a tree and follow it from limb to limb, but in both instances the marten easily escaped.

The marten is a great robber of birds' nests of every sort, including those of the crow and the hawk.



THE MARTEN AND ORIOL'S NEST.

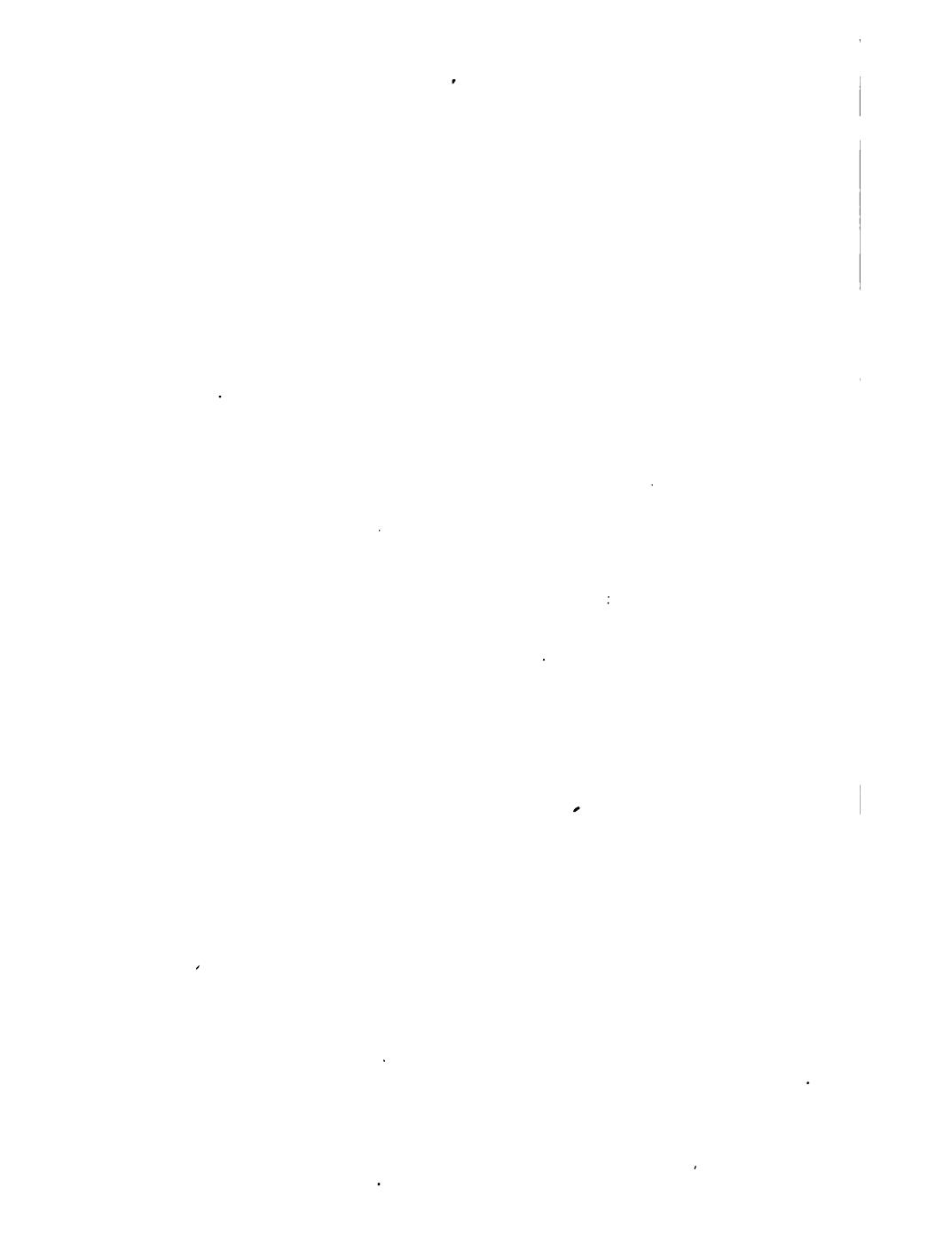
While at the little settlement at the "head" of Lake Chesuncook, I shot a marten in the very act of robbing an oriole's nest. The scoldings of the distressed old birds first called my attention; and, creeping up, I saw the marten crouched on the limb of a great maple, from

which the nest was suspended on two twigs. It seemed to have paused while about to take the eggs, watching the birds that, with ruffed feathers and snapping beaks, kept darting down at their plunderer, the very images of impotent wrath.

While at the Muculsea Mountain one afternoon, as I was going along the ridge of one of the spurs, a great *chickering* and *chirring* broke out all at once a little way ahead; and, coming up, I saw a marten chasing a grey squirrel on a high pine stub, standing out upon the ledge. In racing up the stub they went round and round it, corkscrew fashion, quite to the top, then down again. The stub was sixty or seventy feet in height. I think they circled at least twenty times in going up, and as many coming down, the marten not two feet behind, and I do not think they were seven seconds going to the top and back. Getting to the root, the squirrel whipped into a cranny between two stones too small for the marten, which began to dig and scratch—a chance I improved to secure him for my bag.

IN THE WOODS OF NOVA SCOTIA.

WITH FIRE.





IN THE WOODS OF NOVA SCOTIA.

WITH FIRE.

I CAN conceive of nothing in this world more awful than one of those fires which have frequently rushed through forests in North America, with more fearful rapidity and destructive fury than any lava-stream that ever poured from the fiercest volcano.

The first time I ever saw the traces of such a conflagration was in Nova Scotia, between Halifax and Truro, on the road to Pietou. The driver of the stage—and a better or merrier never mounted a box or guided a team through mud and over corduroy—pointed me out the spot in which he and his charge had a most narrow escape.

While pursuing his journey along one of these forest roads, ramparted on each side by tall trees that show

but a narrow strip of blue sky overhead, he found himself involved in volumes of smoke bursting from the woods. It did not require the experience of an inhabitant of the great Western Continent to reveal to him instantly his terrible position. The woods were on fire!

But whether the fire was far off or near, he could not tell. If far off, he knew it was making towards him with the speed of a racehorse; if near, a few minutes must involve him in the conflagration.

Suddenly the fire burst before him! It was crossing the road, and forming a canopy overhead; sending long tongues of flame, with wreaths of smoke, from one tree-top to another; crackling and roaring as it sped upon its devouring path; licking up the tufted heads of the pines, while the wind whirled them onwards to extend the conflagration.

What was to be done?

To retreat was useless. Miles of forest were behind ready to be consumed. There was one hope only of escape. Nathan had heard in the morning a report, that a mill had been burnt. The spot where it had stood was about six hundred yards ahead. He argued, that the fire having been there, and consumed everything, could not again have visited the same place. He determined to make a desperate rush through fire and smoke to reach the clearance.

The conflagration was as yet above him like a glowing arch, though it had partially extended to the ground on

either side. He had six horses to be sure, tried animals, who knew his voice, and whom he seemed to love as friends; but such a coach!—lumbering and springless, and full of passengers too, chiefly ladies; and such roads!—a combination of trunks of trees buried in thick mud. But on he must go, or perish.

Bending his head down, blind, hardly able to breathe, lashing his horses, and shouting to the trembling, terrified creatures, and while the ladies screamed in agony of fear, Nathan went plunging and tossing through the terrific scene!

A few minutes more, and there is no hope, for the coach is scorched, and about to take fire; and the horses are getting unmanageable! Another desperate rush—he has reached the clearance, and there is the mill, a mass of charred wood, surrounded by a forest of ebony trunks growing out of charred earth;—the fire has passed, and Nathan is safe!

“Oh! sir,” he said, “it *was* frightful! Think only if a horse had stumbled or fallen! or had the fire caught us farther back!—five minutes more would have done it, sir!”

That same fire consumed a space of forest ten miles long and three broad!

But what was such a fire even, to the memorable one which devastated Miramichi, in New Brunswick, about twenty-five years ago! That terrific conflagration is unparalleled in the history of consumed forests.

It broke out on the 7th October, 1825, about sixty

miles above the town of Newcastle, at one in the afternoon, and before ten the same night it had reached twenty miles beyond ; thus traversing, in nine hours. a distance of eighty miles of forest, with a breadth of about twenty-five ! Over this great tract of country everything was destroyed ; one hundred and sixty persons perished : not a tree was left; the very fish in the streams were scorched and found lying afterwards dead in heaps.

The morning of that dreadful day was calm and sultry ; but in an instant smoke swept over the town of Newcastle (situated on the river Miramichi), which turned day into night. The darkness was so unexpected—so sudden—so profound—that many cried that the Judgment had come.

But soon the true cause was suspected. Suspicions were speedily followed by certainty, as the flames were seen bursting through the gloom. Every one made for the river ; some got into boats moored near the beach, some on rafts of timber, while others stood in the water. Terrified mothers with their families, decrepit old men and women, and, worse than all, the sick and dying, were hurried, in despairing crowds, to the stream, to escape the flames which were already devouring their houses, and making a bonfire of the thriving town.

Each succeeding hour added some new horror to the scene. The rarefaction and exhaustion of the air by the intense heat over so great a space, caused, as was supposed, such a rush of cold air from the ocean, that a hurricane rushed in fury along the river, tearing burning

THE ESCAPE.





trees up by the roots, hurling flaming branches through the air for five or six miles (which set fire to the shipping and to the woods on the other side of the broad stream), causing, at the same time, such a rolling sea up the river as threatened to swamp the boats, and sweep the miserable refugees from the rafts!

It seems incredible, but we believe there is no doubt as to the fact, that the ashes of the fire fell thick on the streets of Halifax, St. John's Newfoundland, and Quebec; and that some were carried as far as the Bermudas, while the smoke darkened the air hundreds of miles off!

That terrible night is fresh in the memory of all who endured its horrors. One of my informants, speaking of it, said—

“No language can describe it! I do not think I shall see anything like it again in this world, or until the last day! I was in a druggist's shop getting medicine for my wife, who was confined to bed with fever. The druggist was pouring a few drops into a phial, when literally, in a twinkling of an eye, it became so dark that he could not see to drop the medicine, and I could not see his face! ‘The last day has come!’ we both exclaimed.

“I left the shop to go home; but it was so pitch dark that I could not see the road, and had to walk in the ditch which bordered it.

“Guided by the paling, and assisted by a friend, I got my wife and children to the river, and placed them on a

raft; and what a scene!—what weeping and crying of those whose relations lived in the settlements farther back, and for whom they knew there was now no escape!

“But there is no use talking about it. No tongue can find words to picture that night! Fire and smoke, wind and water, all spending their utmost fury; the children



SUMMER IN THE BARRENS.

crying—the timid screaming—the sick in misery—the brave at their wits' end—and all knowing, too, that we had lost many friends, and all our property. I shudder to think of it!”

That fire has left singular traces of its journey. The road from Newcastle to Bathurst, near the Bay of Chaleur,

passes for five or six miles through a district called The Barrens. The scene which meets the eye of the traveller is perhaps unequalled. Far as the eye can reach upon every side, there is nothing but desolation.

The forest extends, as it has done for ages, across plains, and vanishes over the undulating hills which bound the distant horizon. But while all the trees, with most of their branches, remain, spring extracts no bud from them, nor does summer clothe even a twig with foliage. All is a barren waste! The trees are not black now, but white, and bleached by sun and rain: and far to the horizon, round and round, nothing is discerned but one vast and apparently boundless forest of the white skeleton trunks of dead leafless trees!

That immense tract is doomed to remain barren, perhaps, for ever,—at least for many long years to come. It is avoided by the emigrant,—nay, the very birds and wild beasts seem to have for ever deserted it. The trees would not, in a country of forest, pay the expense of cutting them down for firewood, even were the chopping process of half-burnt trunks less difficult and disagreeable than it is; while the land has become so scoured by the exuberant crop of various plants which grow up in such soil, when cleared by a fire, as to be comparatively useless in a colony of countless acres yet untouched by the plough of the settler.

Though no such fire as that which devastated Miramichi ever visited any of our colonies before or since, yet partial fires are very common.

I saw a very respectable Scotch emigrant in Prince Edward's Island, whose house was suddenly caught by one of those dreadful visitations, and two interesting daughters were burnt alive, before their father, who escaped, could warn them of their danger.

THE END.

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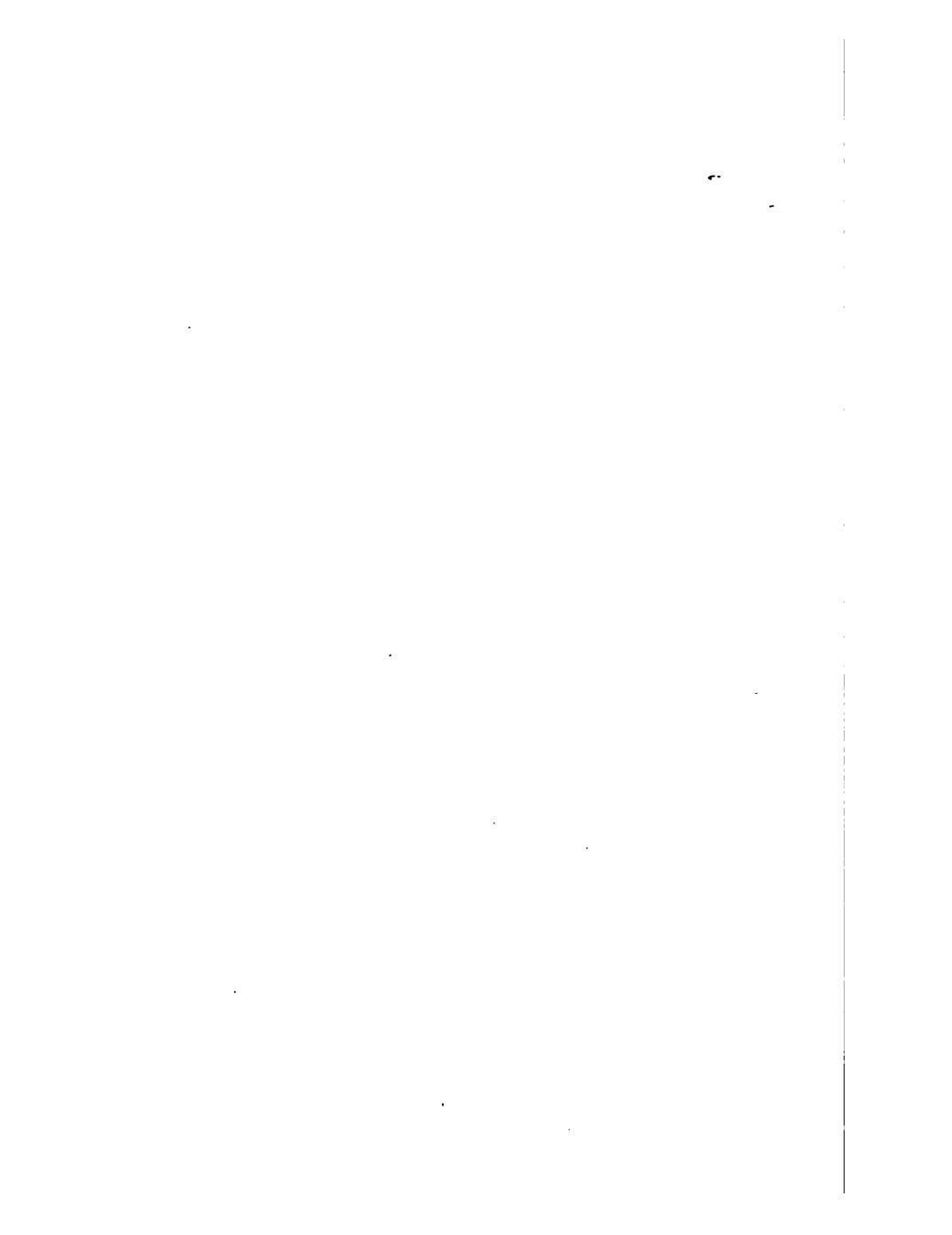
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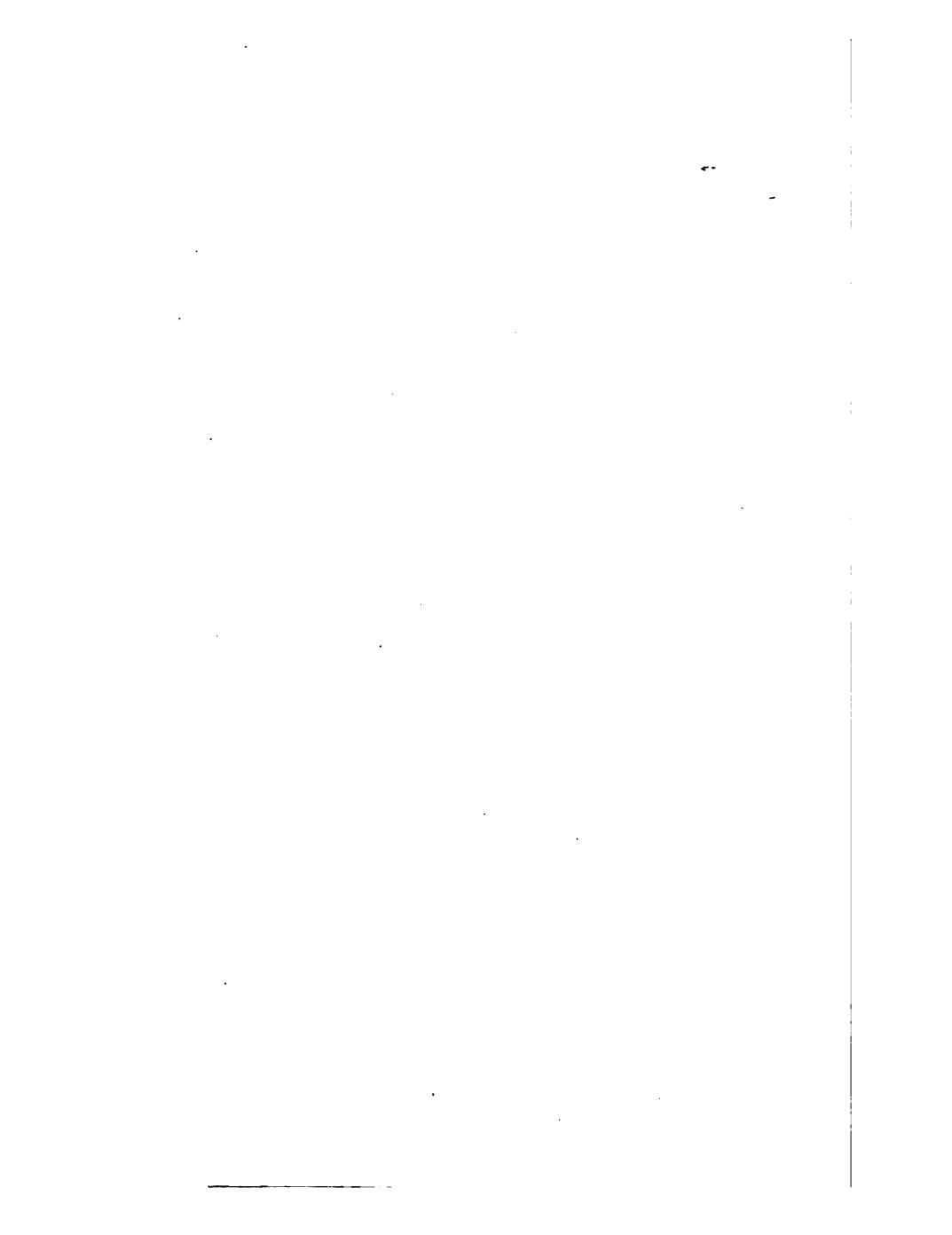
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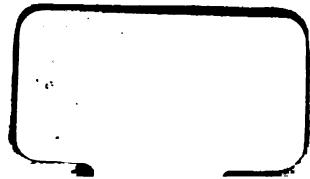
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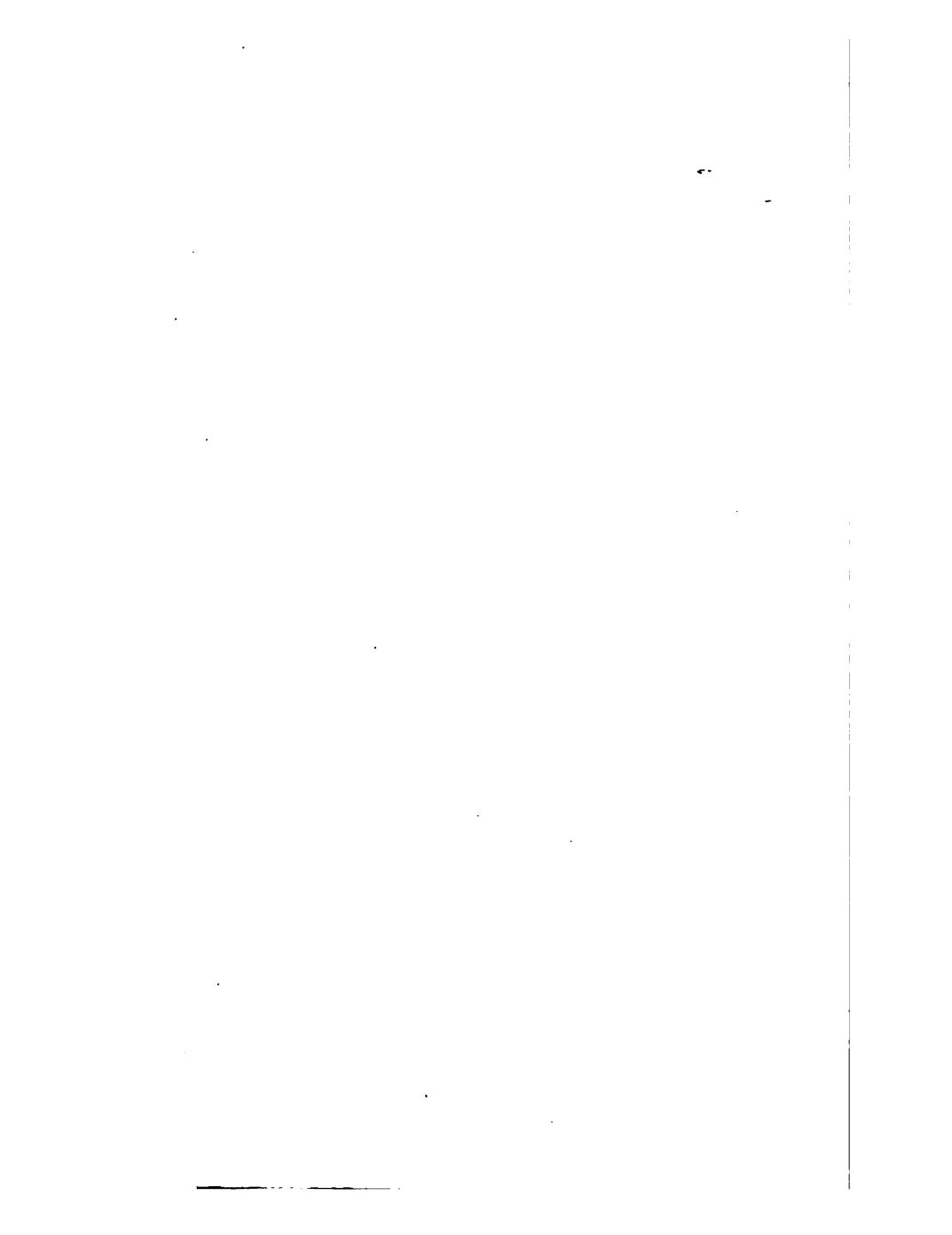














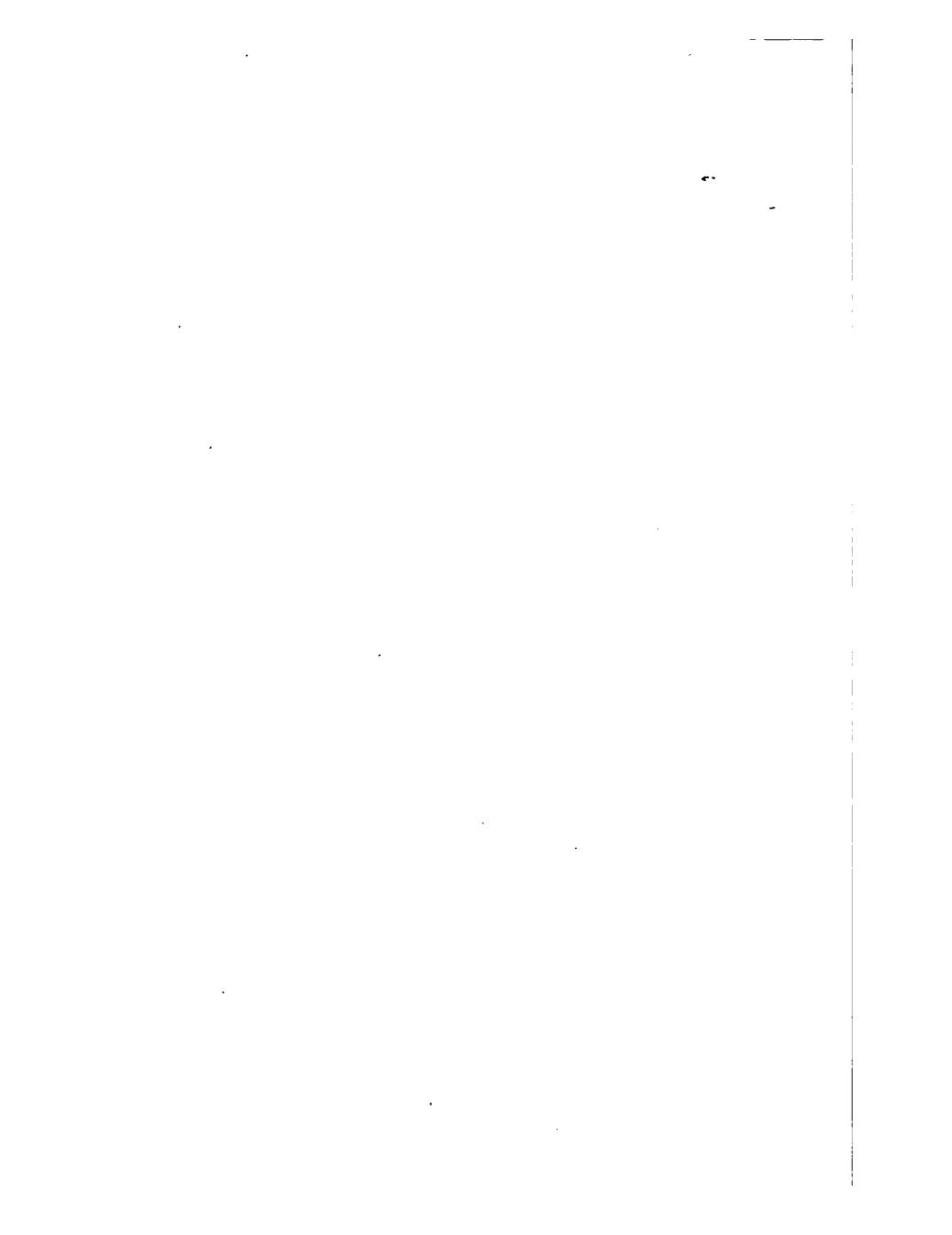




TABLE 1. The mean number of words used by the child in the first year of life

Parental culture	Mean number of words	SD
High	10.2	2.5
Medium	9.5	2.4
Low	8.8	2.4
Total	9.3	2.4

and the mean number of words used by the child in the first year of life. The results are shown in Table 1.

It can be seen that the mean number of words used by the child in the first year of life is significantly higher in the high culture group than in the low culture group ($F = 10.1, p < 0.01$).

Table 2 shows the mean number of words used by the child in the first year of life, according to the sex of the child and the culture of the parents. The results are shown in Table 2.

It can be seen that the mean number of words used by the child in the first year of life is significantly higher in the high culture group than in the low culture group ($F = 10.1, p < 0.01$).

Table 3 shows the mean number of words used by the child in the first year of life, according to the sex of the child and the culture of the parents. The results are shown in Table 3.

It can be seen that the mean number of words used by the child in the first year of life is significantly higher in the high culture group than in the low culture group ($F = 10.1, p < 0.01$).

Table 4 shows the mean number of words used by the child in the first year of life, according to the sex of the child and the culture of the parents. The results are shown in Table 4.

It can be seen that the mean number of words used by the child in the first year of life is significantly higher in the high culture group than in the low culture group ($F = 10.1, p < 0.01$).

Table 5 shows the mean number of words used by the child in the first year of life, according to the sex of the child and the culture of the parents. The results are shown in Table 5.

It can be seen that the mean number of words used by the child in the first year of life is significantly higher in the high culture group than in the low culture group ($F = 10.1, p < 0.01$).

Table 6 shows the mean number of words used by the child in the first year of life, according to the sex of the child and the culture of the parents. The results are shown in Table 6.

It can be seen that the mean number of words used by the child in the first year of life is significantly higher in the high culture group than in the low culture group ($F = 10.1, p < 0.01$).

Table 7 shows the mean number of words used by the child in the first year of life, according to the sex of the child and the culture of the parents. The results are shown in Table 7.

It can be seen that the mean number of words used by the child in the first year of life is significantly higher in the high culture group than in the low culture group ($F = 10.1, p < 0.01$).